SAMSUNG

Monitor
User Manual

S24E510C

The color and the appearance may differ depending on the product, and the specifications are subject to change without prior notice to improve the performance.

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Chapter 01
Before Using the Product

Copyright

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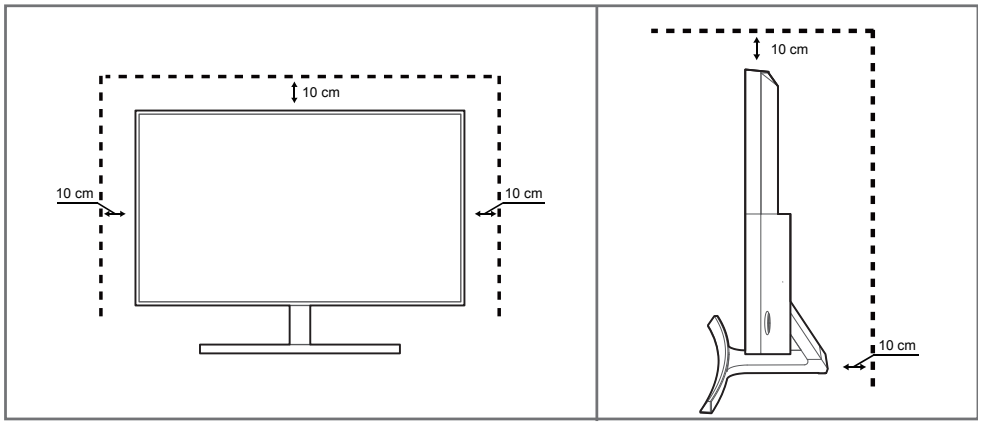
Securing the Installation Space

Ensure some space around the product for ventilation. An internal temperature rise may cause fire and damage the product. Be sure to allow the amount of space as shown below or greater when installing the product.

— The exterior may differ depending on the product.



Precautions for storage

High-glossy models can develop white stains on the surface if an ultrasonic wave humidifier is used nearby.

— Contact your nearest Samsung Customer Service Center if you want to clean the inside of the product (Service fee will be charged.)

Safety Precautions

Caution

RISK OF ELECTRIC SHOCK DO NOT OPEN

Caution : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. (OR BACK)

THERE ARE NO USER SERVICEABLE PARTS INSIDE.

REFER ALL SERVICING TO QUALIFIED PERSONNEL.

This symbol indicates that high voltage is present inside.

It is dangerous to make any kind of contact with any internal part of this product.

This symbol alerts you that important literature concerning operation and maintenance has been included with this product.

Symbols

Warning

A serious or fatal injury may result if instructions are not followed.

Caution

Personal injury or damage to properties may result if instructions are not followed.

Activities marked by this symbol are prohibited.

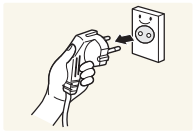
Instructions marked by this symbol must be followed.

Cleaning

— Exercise care when cleaning as the panel and exterior of advanced LCDs are easily scratched.

— Take the following steps when cleaning.

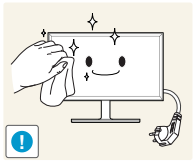
— The following images are for reference only. Real-life situations may differ from what is shown in the images.



1 Power off the product and computer.

2 Disconnect the power cord from the product.

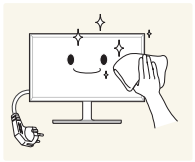
— Hold the power cable by the plug and do not touch the cable with wet hands. Otherwise, an electric shock may result.



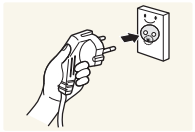
3 Wipe the monitor with a clean, soft and dry cloth.

- Do not apply a cleaning agent that contains alcohol, solvent, or surfactant to the monitor.

- Do not spray water or detergent directly on the product.



4 Wet a soft and dry cloth in water and wring thoroughly to clean the exterior of the product.



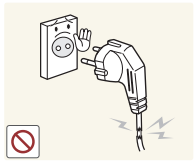
5 Connect the power cord to the product when cleaning is finished.

6 Power on the product and computer.

Electricity and Safety

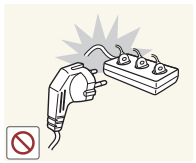
— The following images are for reference only. Real-life situations may differ from what is shown in the images.

Warning



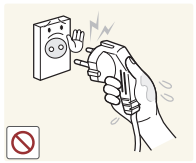
Do not use a damaged power cord or plug, or a loose power socket.

- An electric shock or fire may result.

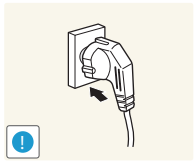


Do not use multiple products with a single power socket.

- Overheated power sockets may cause a fire.

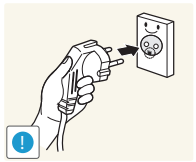


Do not touch the power plug with wet hands. Otherwise, an electric shock may result.



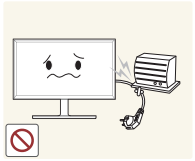
Insert the power plug all the way in so it is not loose.

- An unsecure connection may cause a fire.



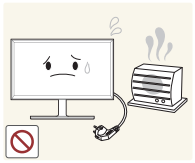
Connect the power plug to a grounded power socket (type 1 insulated devices only).

- An electric shock or injury may result.



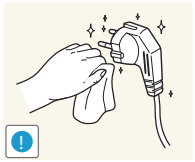
Do not bend or pull the power cord with force. Be careful not to leave the power cord under a heavy object.

- Damage to the cord may result in a fire or electric shock.



Do not place the power cord or product near heat sources.

- A fire or electric shock may result.



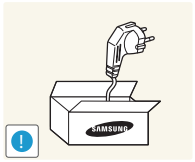
Clean any dust around the pins of the power plug or the power socket with a dry cloth.

- A fire may result.

Caution

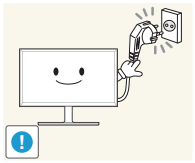
Do not disconnect the power cord while the product is being used.

- The product may become damaged by an electric shock.



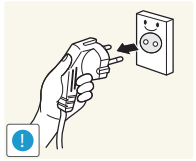
Only use the power cord provided with your product by Samsung. Do not use the power cord with other products.

- A fire or electric shock may result.



Keep the power socket where the power cord is connected unobstructed.

- The power cord must be disconnected to cut off power to the product when an issue occurs.



Hold the plug when disconnecting the power cord from the power socket.

- An electric shock or fire may result.

Installation

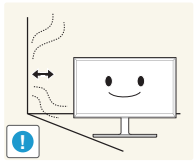
Warning

DO NOT PLACE CANDLES, INSECT REPELLANTS OR CIGARETTES ON TOP OF THE PRODUCT. DO NOT INSTALL THE PRODUCT NEAR HEAT SOURCES.

- A fire may result.

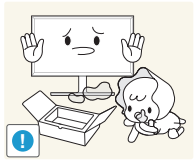
Do not install the product in poorly ventilated spaces such as a bookcase or closet.

- An increased internal temperature may cause a fire.



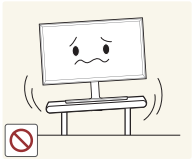
Install the product at least 10cm away from the wall to allow ventilation.

- An increased internal temperature may cause a fire.



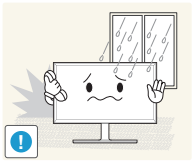
Keep the plastic packaging out of the reach of children.

- Children may suffocate.



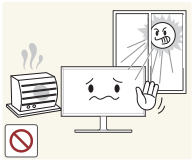
Do not install the product on an unstable or vibrating surface (insecure shelf, sloped surface, etc.)

- The product may fall and become damaged and/or cause an injury.
- Using the product in an area with excess vibration may damage the product or cause a fire.



Do not install the product in a vehicle or a place exposed to dust, moisture (water drips, etc.), oil, or smoke.

- A fire or electric shock may result.



Do not expose the product to direct sunlight, heat, or a hot object such as a stove.

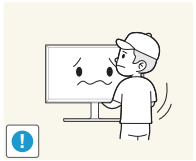
- The product lifespan may be reduced or a fire may result.

Do not install the product within the reach of young children.

- The product may fall and injure children.

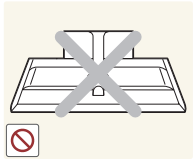
Edible oil, such as soybean oil, can damage or deform the product. Do not install the product in a kitchen or near a kitchen counter.

Caution



Do not drop the product while moving.

- Product failure or personal injury may result.



Do not set down the product on its front.

- The screen may become damaged.

When installing the product on a cabinet or shelf, make sure that the bottom edge of the front of the product is not protruding.

- The product may fall and become damaged and/or cause an injury.
- Install the product only on cabinets or shelves of the right size.

Set down the product gently.

- Product failure or personal injury may result.

Installing the product in an unusual place (a place exposed to a lot of fine dust, chemical substances, extreme temperatures or a significant presence of moisture, or a place where the product will operate continuously for an extended period of time) may seriously affect its performance.

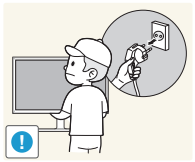
- Be sure to consult Samsung Customer Service Center if you want to install the product at such a place.

Operation

Warning

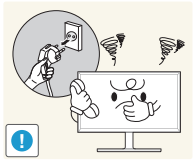
There is a high voltage inside the product. Never disassemble, repair or modify the product yourself.

- A fire or electric shock may result.
- Contact Samsung Customer Service Center for repairs.



To move the product, first disconnect all the cables from it, including the power cable.

- Damage to the cord may result in a fire or electric shock.

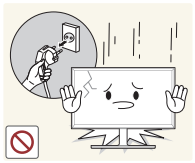


If the product generates abnormal sounds, a burning smell or smoke, disconnect the power cord immediately and contact Samsung Customer Service Center.

- An electric shock or fire may result.

Do not let children hang from the product or climb on top of it.

- Children may become injured or seriously harmed.

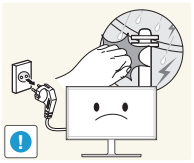


If the product is dropped or the outer case is damaged, turn off the power and disconnect the power cord. Then contact Samsung Customer Service Center.

- Continued use can result in a fire or electric shock.

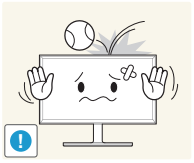
Do not leave heavy objects or items that children like (toys, sweets, etc.) on top of the product.

- The product or heavy objects may fall as children try to reach for the toys or sweets resulting in a serious injury.



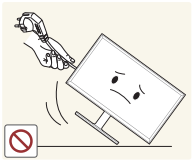
During a lightning or thunderstorm, power off the product and remove the power cable.

- A fire or electric shock may result.



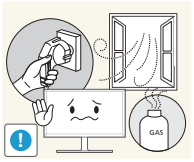
Do not drop objects on the product or apply impact.

- A fire or electric shock may result.



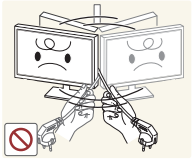
Do not move the product by pulling the power cord or any cable.

- Product failure, an electric shock or fire may result from a damaged cable.



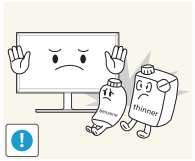
If a gas leakage is found, do not touch the product or power plug. Also, ventilate the area immediately.

- Sparks can cause an explosion or fire.



Do not lift or move the product by pulling the power cord or any cable.

- Product failure, an electric shock or fire may result from a damaged cable.

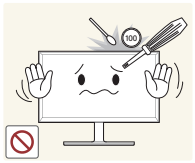


Do not use or keep combustible spray or an inflammable substance near the product.

- An explosion or fire may result.

Ensure the vents are not blocked by tablecloths or curtains.

- An increased internal temperature may cause a fire.



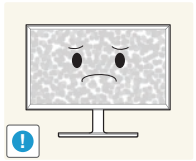
Do not insert metallic objects (chopsticks, coins, hairpins, etc) or objects that burn easily (paper, matches, etc) into the product (via the vent or input/output ports, etc).

- Be sure to power off the product and disconnect the power cord when water or other foreign substances have entered the product. Then contact Samsung Customer Service Center.
- Product failure, an electric shock or fire may result.

Do not place objects containing liquid (vases, pots, bottles, etc) or metallic objects on top of the product.

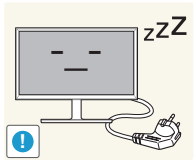
- Be sure to power off the product and disconnect the power cord when water or other foreign substances have entered the product. Then contact Samsung Customer Service Center.
- Product failure, an electric shock or fire may result.

Caution



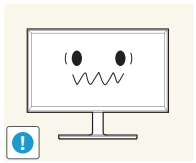
Leaving the screen fixed on a stationary image for an extended period of time may cause afterimage burn-in or defective pixels.

- Activate power-saving mode or a moving-picture screen saver if you will not be using the product for an extended period of time.



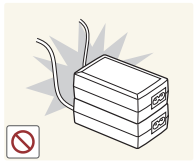
Disconnect the power cord from the power socket if you do not plan on using the product for an extended period of time (vacation, etc).

- Dust accumulation combined with heat can cause a fire, electric shock or electric leakage.



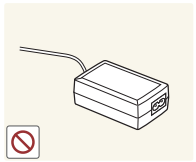
Use the product at the recommended resolution and frequency.

- Your eyesight may deteriorate.



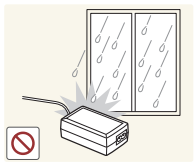
Do not put DC power adapters together.

- Otherwise, a fire may result.



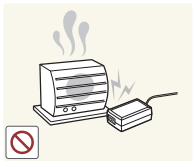
Remove the plastic bag from the DC power adapter before you use it.

- Otherwise, a fire may result.



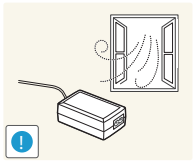
Do not let water enter the DC power device or get the device wet.

- An electric shock or fire may result.
- Avoid using the product outdoors where it can be exposed to rain or snow.
- Be careful not to get the DC power adapter wet when you wash the floor.

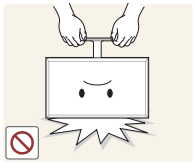


Do not put the DC power adapter near to any heating apparatus.

- Otherwise, a fire may result.

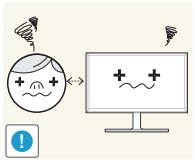


Keep the DC power adapter in a well-ventilated area.



Do not hold the product upside-down or move it by holding the stand.

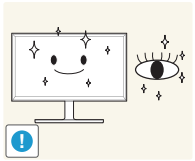
- The product may fall and become damaged or cause an injury.



Looking at the screen too close for an extended period of time can deteriorate your eyesight.

Do not use humidifiers or stoves around the product.

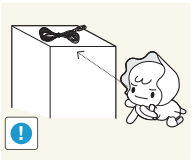
- A fire or electric shock may result.



Rest your eyes for more than 5 minutes for every 1 hour of product use.

- Eye fatigue will be relieved.

Do not touch the screen when the product has been turned on for an extended period of time as it will become hot.



Store small accessories out of the reach of children.

Exercise caution when adjusting the product angle or stand height.

- Your hand or finger may get stuck and injured.
- Tilting the product at an excessive angle may cause the product to fall and an injury may result.

Do not place heavy objects on the product.

- Product failure or personal injury may result.

When using headphones or earphones, do not turn the volume too high.

- Having the sound too loud may damage your hearing.

Correct posture to use the product

Use the product in the correct posture as follows:

- Straighten your back.
- Allow a distance of 45 to 50cm between your eye and the screen, and look slightly downward at the screen. Keep your eyes directly in front of the screen.
- Adjust the angle so light does not reflect on the screen.
- Keep your forearms perpendicular to your upper arms and level with the back of your hands.
- Keep your elbows at about a right angle.
- Adjust the height of the product so you can keep your knees bent at 90 degrees or more, your heels attached to the floor, and your arms lower than your heart.

Chapter 02
Preparations

Checking the Components

- Contact the vendor where you purchased the product if any components are missing.
- The appearance of the components may differ from the images shown.
- The optimal resolution may not be available when using a non-high speed HDMI or HDMI-DVI cable.

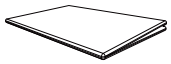
Components

— Components may vary depending on the country.

Quick Setup Guide

Warranty card

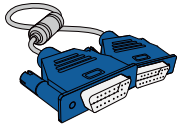
(Not available in some locations)



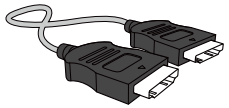
Regulatory guide

Power cable (P.28)

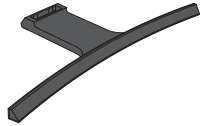
DC power adapter (Detachable) (P.28)



D-SUB cable (Optional) (P.26)



HDMI cable (Optional) (P.27)



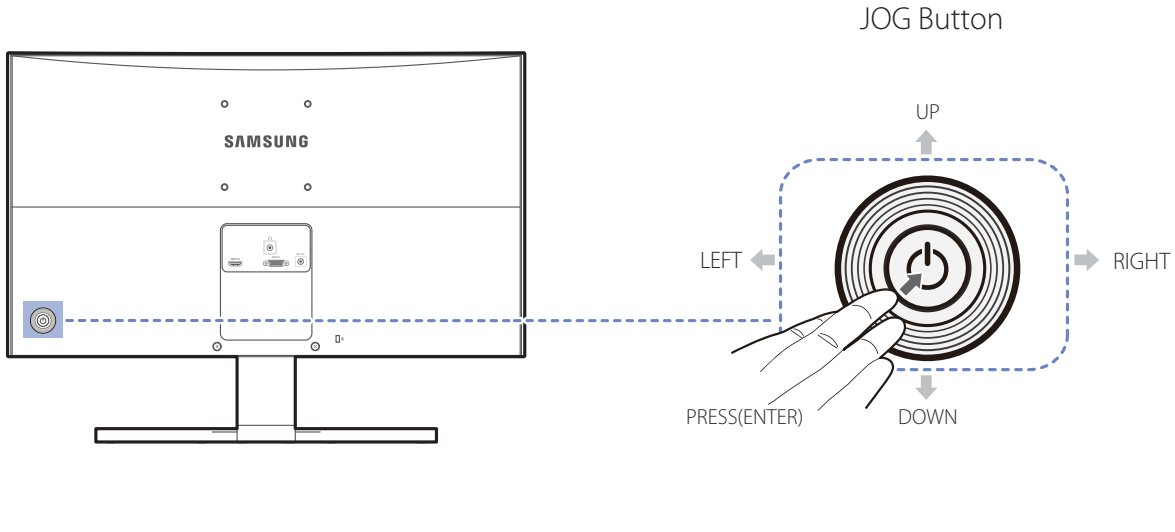
Stand base

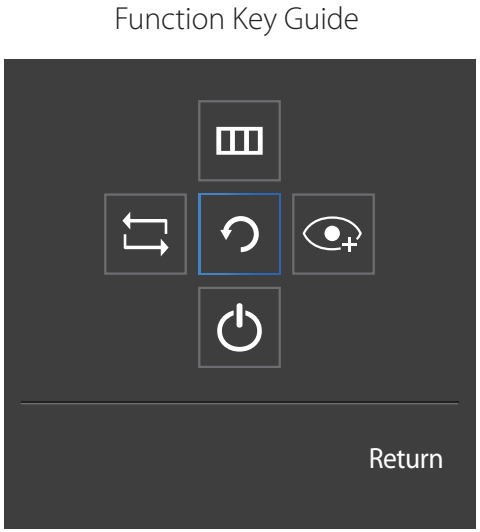
Stand neck

Parts

Control Panel

— The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.

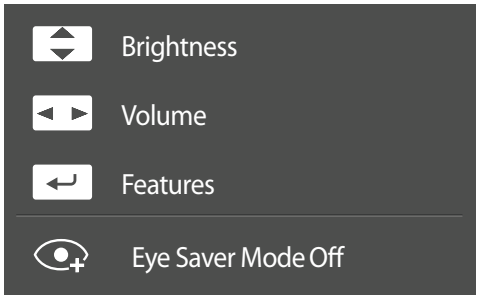




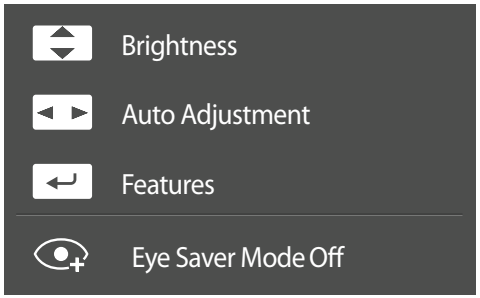
Icons	Description
JOG Button	Multi directional button that helps navigate. — The JOG button is located on the rear left side of the product. The button can be used to move up, down, left or right, or as Enter.
Function Key Guide	Press the JOG button when the screen is turned on. The Function Key Guide will appear. To access the onscreen menu when the guide is displayed, press the corresponding direction button again. — Function Key Guide may vary depending on the function or product model. Please refer to the actual product.

Direct Key guide

HDMI mode



Analog mode



— The shortcut button screen (OSD menu) shown below is displayed only when the monitor screen is turned on, the computer resolution changes, or the input source changes.

— **HDMI** mode option

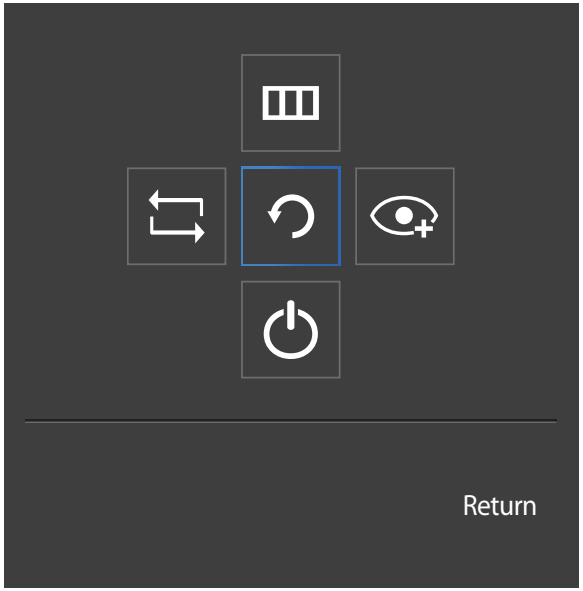
- UP/DOWN: Adjust **Brightness**, **Contrast**, **Sharpness**.
- LEFT/RIGHT: Adjust **Volume**, **Mute**.
- PRESS(ENTER): Display Function Key Guide.

— **Analog** mode option

- UP/DOWN: Adjust **Brightness**, **Contrast**, **Sharpness**.
- LEFT/RIGHT: Adjust the screen settings automatically.
  - — Changing the resolution in Display Properties will activate the **Auto Adjustment** function.
  - — This function is only available in **Analog** mode.
- PRESS(ENTER): Display Function Key Guide.

Function Key Guide

— To enter the main menu or to use other items, press the JOG button to display the Function Key Guide. You can exit by pressing the JOG button again.



UP/DOWN/LEFT/RIGHT: Move to the item you want. The description for each item will appear when the focus changes.

PRESS(ENTER): The selected item will be applied.

Icons	Description
	Selects to change the input signal by moving the JOG button in the Function Key Guide screen. A message will appear on the top left corner of the screen if the input signal has been changed.
	Selects by moving the JOG button in the function key guide screen. The OSD (On Screen Display) of your Monitor's feature appears. OSD control lock: Maintain the current settings, or lock the OSD control to prevent unintended changes to settings. Enable/Disable: To lock/unlock the OSD control, press the LEFT button for 10 seconds when the main menu displayed. — If the OSD control is locked, **Brightness** and **Contrast** can be adjusted. **Eye Saver Mode** is available. **System** ⟶ **Power LED On** is available. **OnScreen Display** can be viewed.
	Selects by moving the JOG button in the function key guide screen. Press to enable or disable **Eye Saver Mode**. The items below are not available if the **Eye Saver Mode** function is enable. **Picture** ⟶ **Game Mode**, **MAGICBright**, **Brightness**, **Color** **System** ⟶ **Eco Saving Plus**
	Selects to turn the Monitor off by moving the JOG button in the function key guide screen.

— Actual models because of functional variation, Function key guide options will be different. Please run the corresponding function based on the actual icon and description.

— When the monitor displays nothing (i.e. Power saving mode or Non-signal mode), 2 direct keys for control source and power could be used as below.

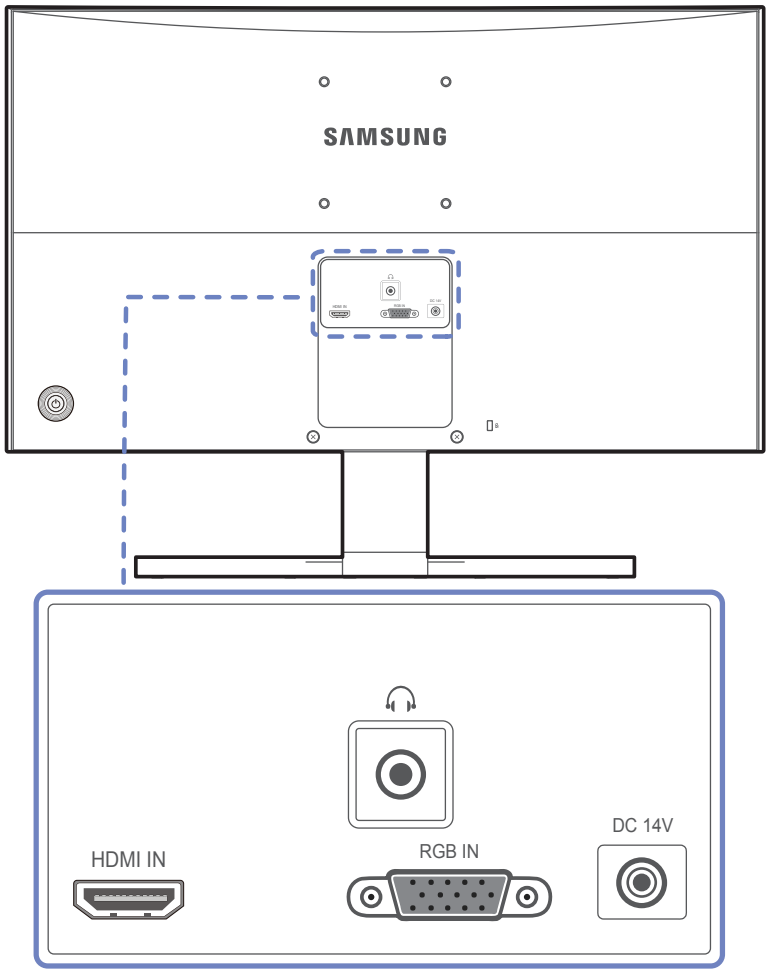
JOG Button	Power saving/Non-signal mode
UP	Source Change
Down	
PRESS(ENTER) for 2 seconds	Power Off

— When the monitor displays the Main menu the JOG Button could be used as below.

JOG Button	Action
UP/DOWN	Move the option
LEFT	Exit the Main menu. Close Sublist without saving value. Value decreases in the slider.
RIGHT	Move to next depth. Value increases in the slider.
PRESS(ENTER)	Move to next depth. Save the value and close Sublist.

Reverse Side

The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.



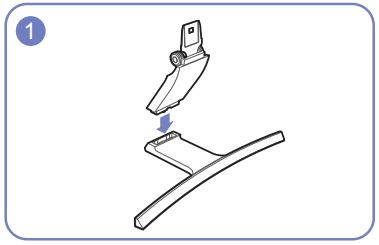
Port	Description
HDMI IN	Connects to a source device using an HDMI cable or HDMI-DVI cable.
	Connect to an audio output device such as headphones.
RGB IN	Connect to a PC using the D-SUB cable.
DC 14V	Connects to the DC power adapter.

Installation

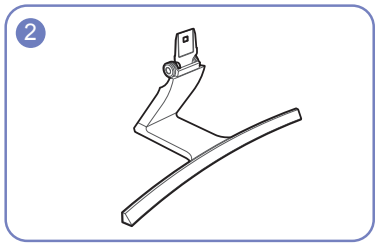
Attaching the Stand

— Before assembling the product, place the product down on a flat and stable surface so that the screen is facing downwards.

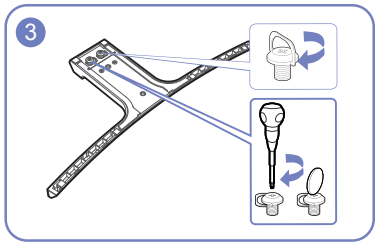
Warning: The product is curved. Placing pressure on the product when on a flat surface may damage the product. When the product is on the ground facing up or down, do not put pressure on it.



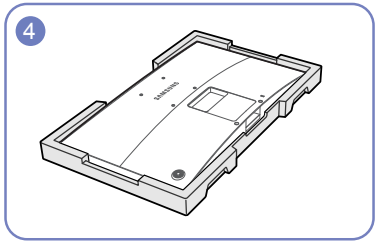
Insert the stand neck into the stand base in the direction shown in the figure.



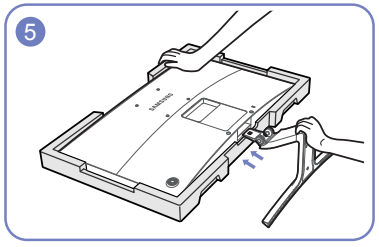
Check that the stand neck is firmly connected.



Tightly fasten the connecting screw at the bottom of the stand base.



Place the protective Styrofoam (cushion) included in the package on the floor and place the product facing down on the Styrofoam, as shown in the image.
If Styrofoam is unavailable, use a thick sitting mat.



Hold the main body of the product with your hand as shown by the figure. Push the assembled stand into the main body in the direction of the arrow as shown in the figure.

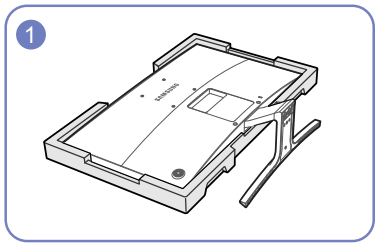
- Caution

Do not hold the product upside down only by the stand.

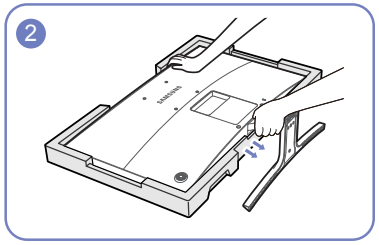
Removing the Stand

— Before assembling the product, place the product down on a flat and stable surface so that the screen is facing downwards.

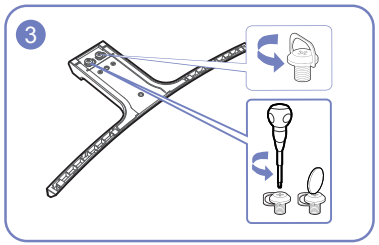
Warning: The product is curved. Placing pressure on the product when on a flat surface may damage the product. When the product is on the ground facing up or down, do not put pressure on it.



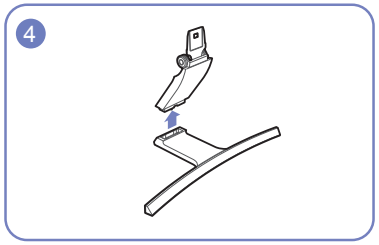
Place the protective Styrofoam (cushion) included in the package on the floor and place the product facing down on the Styrofoam, as shown in the image.
If Styrofoam is unavailable, use a thick sitting mat.



While holding the upper part of the monitor with one hand, pull the stand neck with the other hand in the arrow direction to detach the stand.



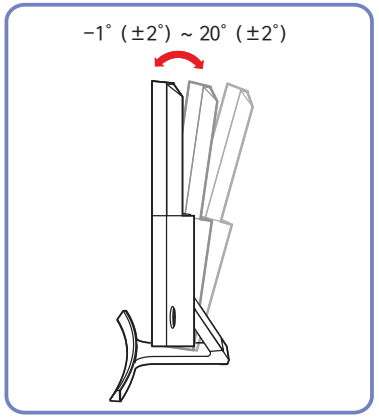
Turn the connecting screw at the bottom of the stand base to separate it.



Remove the stand neck from the stand base by pulling it in the direction of the arrow as shown in the figure.

Adjusting the Product Tilt

— The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.



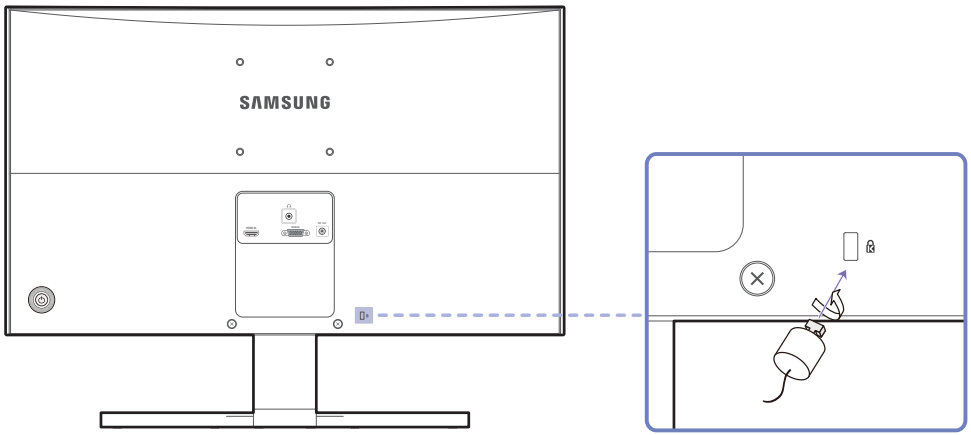
- You can adjust the product tilt.
- Hold the lower part of the product and adjust the tilt carefully.

Anti-theft Lock

— An anti-theft lock allows you to use the product securely even in public places.

— The locking device shape and locking method depend on the manufacturer. Refer to the user guide provided with your anti-theft locking device for details.

To lock an anti-theft locking device:



1 Fix the cable of your anti-theft locking device to a heavy object such as a desk.

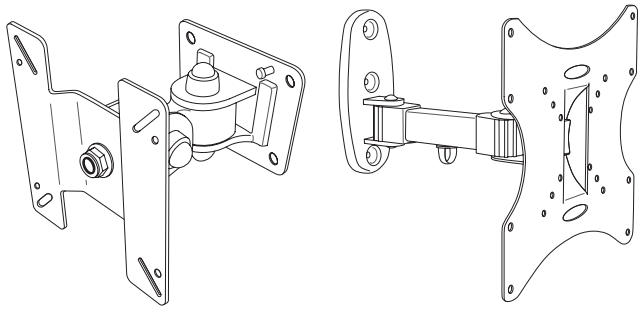
2 Put one end of the cable through the loop on the other end.

3 Insert the locking device into the anti-theft lock slot at the back of the product.

4 Lock the locking device.

- An anti-theft locking device can be purchased separately.
- Refer to the user guide provided with your anti-theft locking device for details.
- Anti-theft locking devices can be purchased at electronics retailers or online.

Installing the Wall Mount



Installing the Wall Mount Kit

The wall mount kit allows you to mount the product on the wall.

Purchase a compatible wall-mount kit to use with the product.

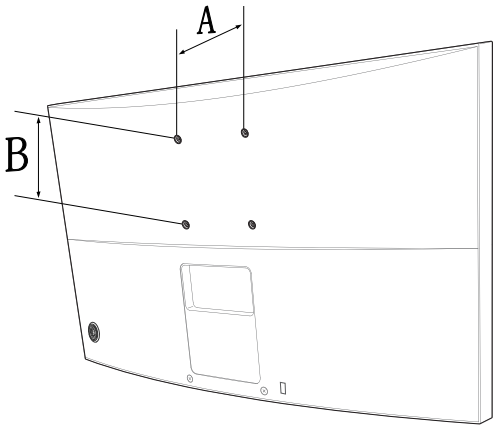
For detailed information on installing the wall mount, see the instructions provided with the wall mount.

We recommend you contact a technician for assistance when installing the wall mount bracket.

Samsung Electronics is not responsible for any damage to the product or injury to yourself or others if you elect to install the wall mount on your own.

Wall Mount Kit Specifications (VESA)

— Install your wall mount on a solid wall perpendicular to the floor. Before attaching the wall mount to surfaces other than plaster board, please contact your nearest dealer for additional information. If you install the product on a slanted wall, it may fall and result in severe personal injury. Samsung wall mount kits contain a detailed installation manual and all parts necessary for assembly are provided.



- For wall mounts that do not comply with the VESA standard screw specifications, the length of the screws may differ depending on the wall mount specifications.
- Do not fasten the screws too firmly. This may damage the product or cause the product to fall, leading to personal injury.
- Samsung is not liable for these kinds of accidents.
- Samsung is not liable for product damage or personal injury when a non-VESA or non-specified wall mount is used or the consumer fails to follow the product installation instructions.
- Do not mount the product at more than a 15 degree tilt.
- Always have two people mount the product on a wall.
- Standard dimensions for wall mount kits are shown in the table below.

Unit: mm

Model name	VESA screw hole specs (A * B) in millimeters	Standard Screw	Quantity
S24E510C	100 x 100	M4	4

— Do not install your Wall Mount Kit while your product is turned on. It may result in personal injury due to electric shock.

Chapter 03
Connecting and Using a Source Device

Before Connecting

Check the following before you connect this product with other devices.

Pre-connection Checkpoints

— Before connecting a source device, read the user manual provided with it. The number and locations of ports on source devices may differ from device to device.

— Do not connect the power cable until all connections are completed. Connecting the power cable during connection may damage the product.

— Check the types of ports at the back of the product you want to connect.

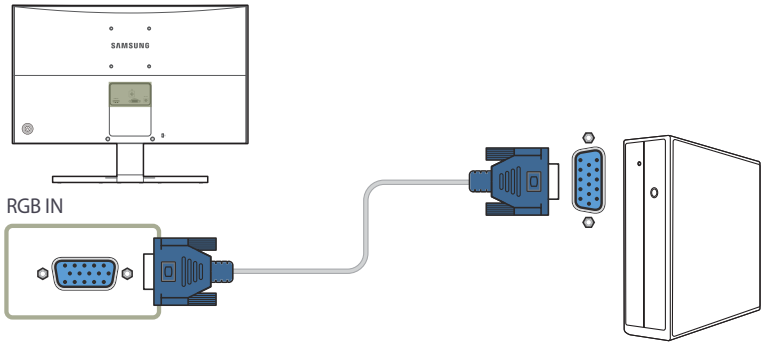
Connecting and Using a PC

Select a connection method suitable for your PC.

— Connecting parts may differ in different products.

Connection Using the D-SUB Cable (Analog Type)

— Do not connect the power cable before connecting all other cables. Ensure you connect a source device first before connecting the power cable.



1 Connect the D-SUB cable to the **RGB IN** port on the back of the product and the RGB port on the PC.

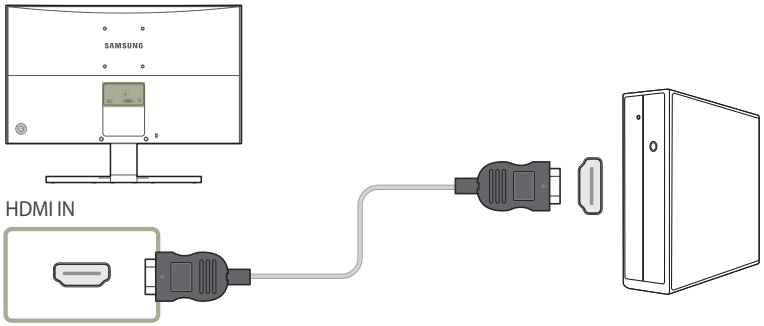
2 Connect the DC power adapter to the product and a power socket. Next, turn on the power switch on the PC.

3 Change the input source to **Analog** controlling the JOG button UP/DOWN, when input source is not set.

— Provided ports may vary depending on the product.

Connection Using the HDMI Cable

— Do not connect the power cable before connecting all other cables.
Ensure you connect a source device first before connecting the power cable.



1 Connect the HDMI cable to the **HDMI IN** port on the back of the product and the HDMI port on the PC.

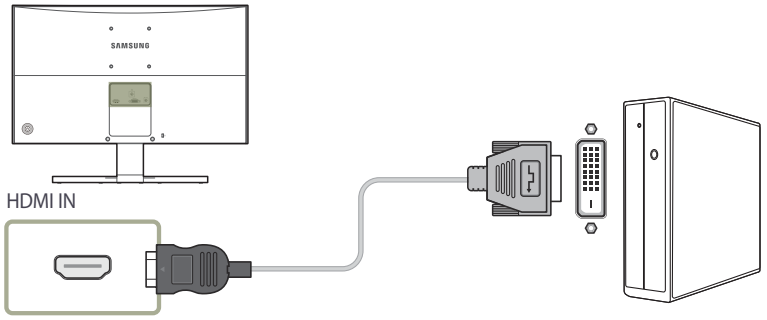
2 Connect the DC power adapter to the product and a power socket. Next, turn on the power switch on the PC.

3 Change the input source to **HDMI** controlling the JOG button UP/DOWN, when input source is not set.

— Provided ports may vary depending on the product.

Connection Using an HDMI-DVI Cable

— Do not connect the power cable before connecting all other cables.
Ensure you connect a source device first before connecting the power cable.



1 Connect the HDMI-DVI cable to the **HDMI IN** port on the back of the product and the DVI port on the PC.

2 Connect the DC power adapter to the product and a power socket. Next, turn on the power switch on the PC.

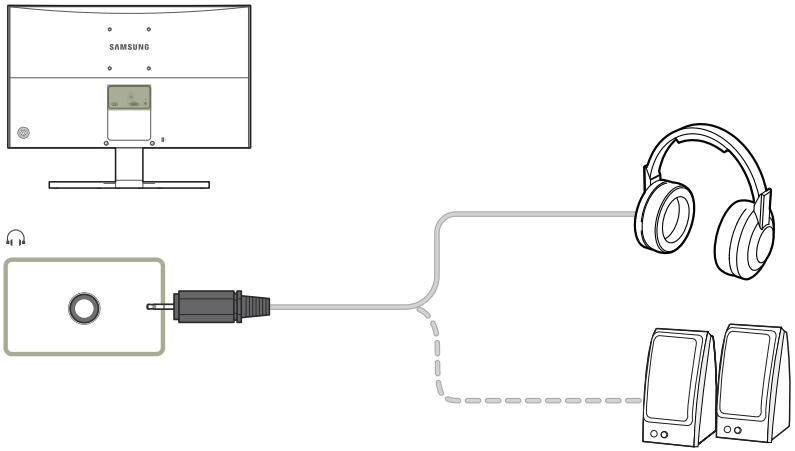
3 Change the input source to **HDMI** controlling the JOG button UP/DOWN, when input source is not set.

— Provided ports may vary depending on the product.

— The audio function is not supported if the source device is connected using the HDMI-DVI cable..

Connecting to Headphones or Speakers

— Do not connect the power cable before connecting all other cables.
Ensure you connect a source device first before connecting the power cable.



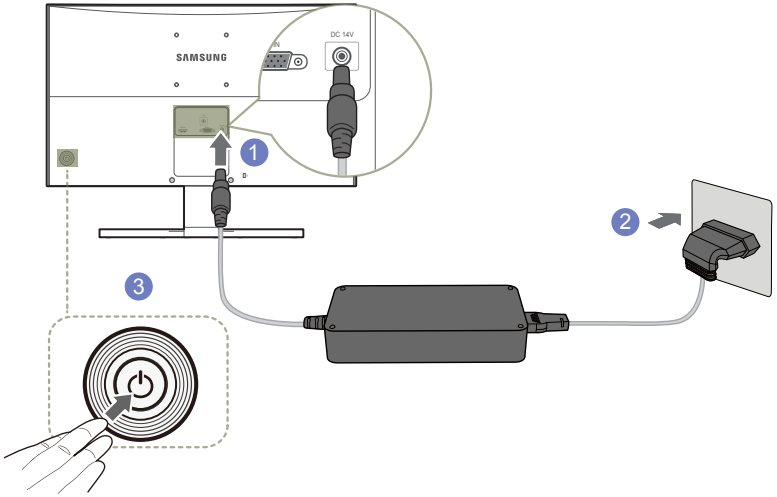
1 Connect an audio output device such as headphones or speakers to 🎧 on the product.

— This function is only available in **HDMI** mode.

— The sound could only be heard when using the HDMI to HDMI cable.

Connecting the Power

Power connection using detachable DC power adapter



1 Connect the power cable to the DC power adapter. Then, connect the DC power adapter to the **DC 14V** port on the back of the product.

2 Next, connect the power cable to the power outlet.

3 Press the JOG button on the back of the monitor to turn it on.

— The input voltage is switched automatically.

Driver Installation

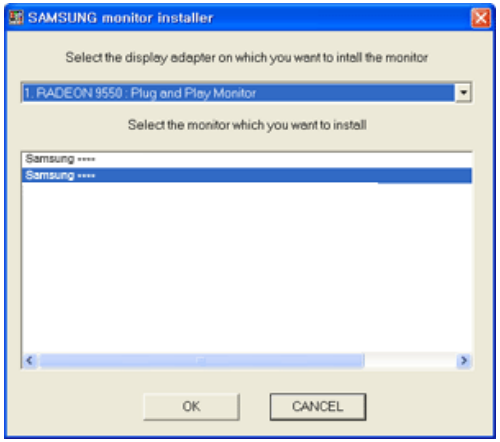
— You can set the optimum resolution and frequency for this product by installing the corresponding drivers.

— To install the latest version of the product driver, download it from the Samsung Electronics website at http://www.samsung.com.

1 Click on the "Windows Driver" downloaded from the website.

2 Follow the instructions given on the screen to proceed with installation.

3 Select your product model from the list of models.


SAMSUNG monitor installer
Select the display adapter on which you want to intall the monitor
1. RADEON 9550 : Plug and Play Monitor
Select the monitor which you want to install
Samsung ****
Samsung ****
OK
CANCEL

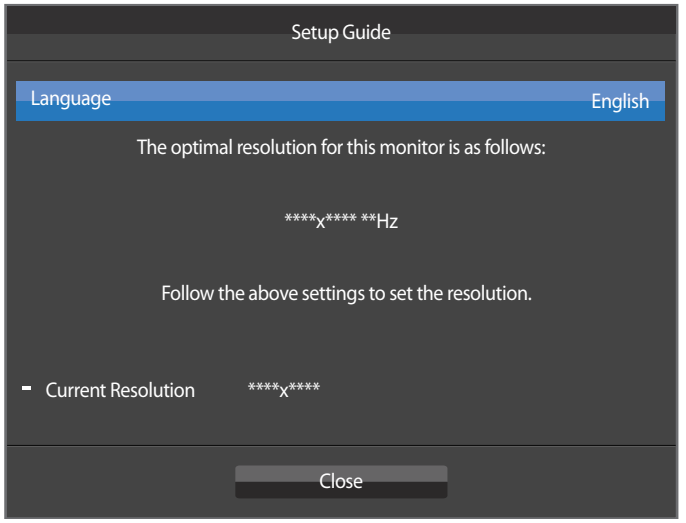
4 Go to Display Properties and check that the resolution and refresh rate are appropriate.

Refer to your Windows OS manual for further details.

Setting Optimum Resolution

An information message about setting optimum resolution will appear if you power on the product for the first time after purchase.

Select a language on the product and change the resolution on your PC to the optimum setting.



1 Select a language by moving the JOG button LEFT/RIGHT. Next, press the JOG button.

2 To hide the information message, press the JOG button.

— If the optimum resolution is not selected, the message will appear up to three times for a specified time even when the product is turned off and on again.

— The optimum resolution can also be selected in **Control Panel** on your PC.

Chapter 04
Screen Setup

Configure the screen settings such as brightness.

A detailed description of each function is provided. Refer to your product for details.

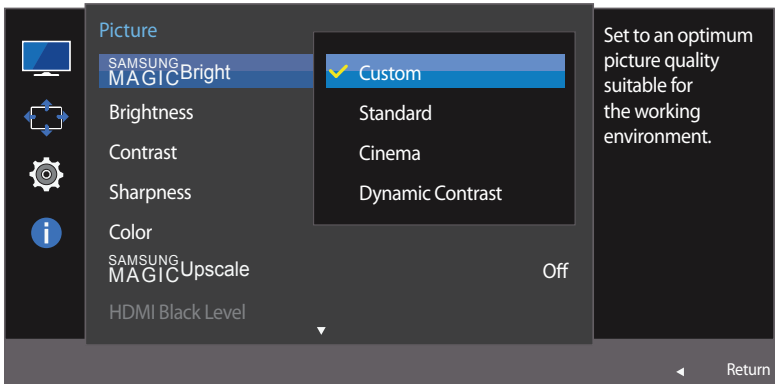
SAMSUNG MAGIC Bright

This menu provides an optimum picture quality suitable for the environment where the product will be used.

- This menu is not available when **Eco Saving Plus** is enabled.
- This menu is not available when **Game Mode** is enabled.
- This menu is not available when **Eye Saver Mode** is enabled.

You can customize the brightness to suit your preferences.

In PC mode



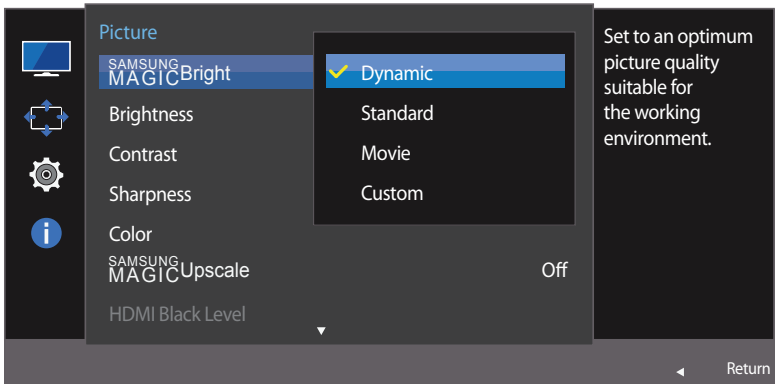
– The displayed image may differ depending on the model.

Configuring SAMSUNG MAGIC Bright

1. When the Function Key Guide appears, select ▥ by moving the JOG button UP. Next, press the JOG button.
2. Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.
3. Move to SAMSUNG MAGIC **Bright** controlling the JOG button UP/DOWN and press the JOG button.

- **Custom**: Customize the contrast and brightness as required.
- **Standard**: Obtain a picture quality suitable for editing documents or using Internet.
- **Cinema**: Obtain the brightness and sharpness of TVs suitable for enjoying video and DVD content.
- **Dynamic Contrast**: Obtain balanced brightness through automatic contrast adjustment.

In AV mode



– The displayed image may differ depending on the model.

When the external input is connected through HDMI and **PC/AV Mode** is set to **AV**, **SAMSUNG MAGIC Bright** has four automatic picture settings (**Dynamic**, **Standard**, **Movie** and **Custom**) that are preset at the factory. You can activate either **Dynamic**, **Standard**, **Movie** or **Custom**. You can select **Custom** which automatically recalls your personalized picture settings.

- **Dynamic**: Select this mode to view a sharper image than in **Standard** mode.
- **Standard**: Select this mode when the surroundings are bright. This also provides a sharp image.
- **Movie**: Select this mode when the surroundings are dark. This will save power and reduce eye fatigue.
- **Custom**: Select this mode when you want to adjust the image according to your preferences.

4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.

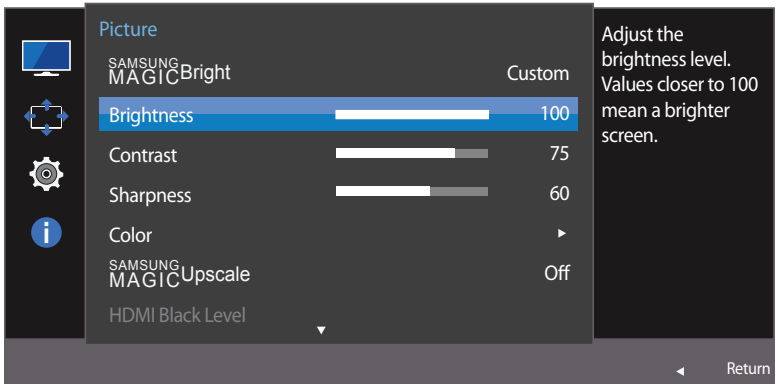
5 The selected option will be applied.

Brightness

You can adjust the general brightness of the picture. (Range: 0~100)

A higher value will make the picture appear brighter.

- This menu is not available when SAMSUNG MAGIC**Bright** is set to **Dynamic Contrast** mode.
- This menu is not available when **Eco Saving Plus** is enabled.
- This menu is not available when **Eye Saver Mode** is enabled.



– The displayed image may differ depending on the model.

Configuring Brightness

1. When the Function Key Guide appears, select ▥ by moving the JOG button UP. Next, press the JOG button.
2. Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.
3. Move to **Brightness** controlling the JOG button UP/DOWN and press the JOG button.
4. Adjust the **Brightness** controlling the JOG button LEFT/RIGHT.
5. The selected option will be applied.

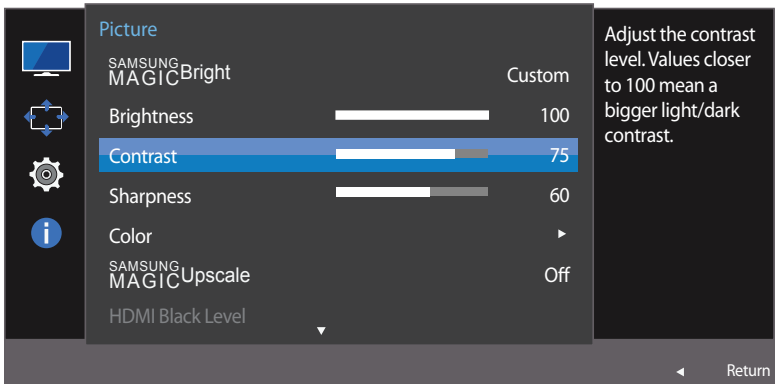
Contrast

Adjust the contrast between the objects and background. (Range: 0~100)

A higher value will increase the contrast to make the object appear clearer.

— This option is not available when SAMSUNG MAGIC**Bright** is in **Cinema** or **Dynamic Contrast** mode.

— This menu is not available when **Game Mode** is enabled.



– The displayed image may differ depending on the model.

Configuring Contrast

1 When the Function Key Guide appears, select ▥ by moving the JOG button UP. Next, press the JOG button.

2 Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.

3 Move to **Contrast** controlling the JOG button UP/DOWN and press the JOG button.

4 Adjust the **Contrast** controlling the JOG button LEFT/RIGHT.

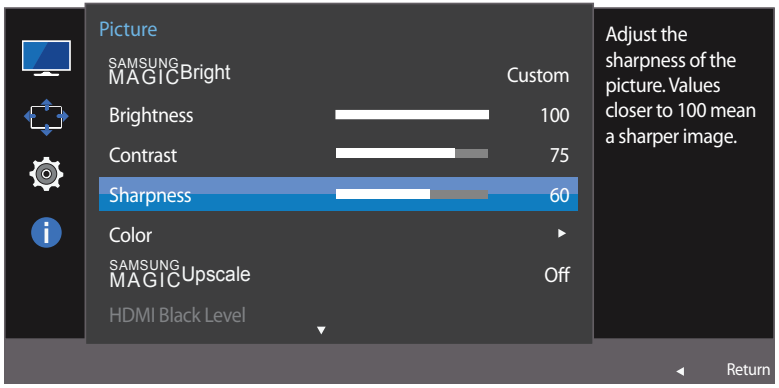
5 The selected option will be applied.

Sharpness

Make the outline of objects more clear or blurry. (Range: 0~100)

A higher value will make the outline of objects clearer.

- This option is not available when SAMSUNG MAGIC**Bright** is in **Cinema** or **Dynamic Contrast** mode.
- This menu is not available when SAMSUNG MAGIC**Upscale** is in **Mode1** or **Mode2** mode.
- This menu is not available when **Game Mode** is enabled.



– The displayed image may differ depending on the model.

Configuring Sharpness

1. When the Function Key Guide appears, select by moving the JOG button UP. Next, press the JOG button.
2. Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.
3. Move to **Sharpness** controlling the JOG button UP/DOWN and press the JOG button.
4. Adjust the **Sharpness** controlling the JOG button LEFT/RIGHT.
5. The selected option will be applied.

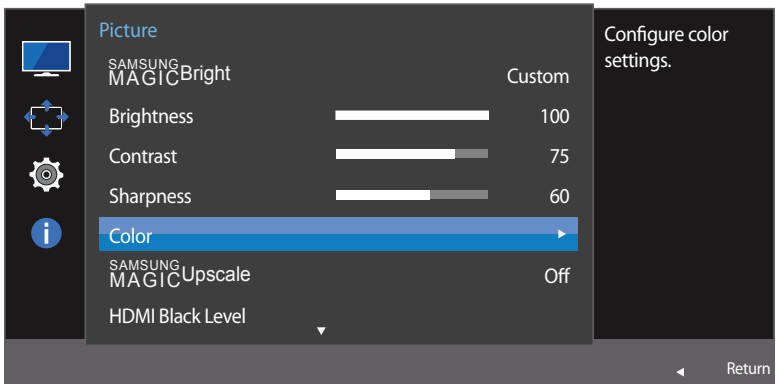
Color

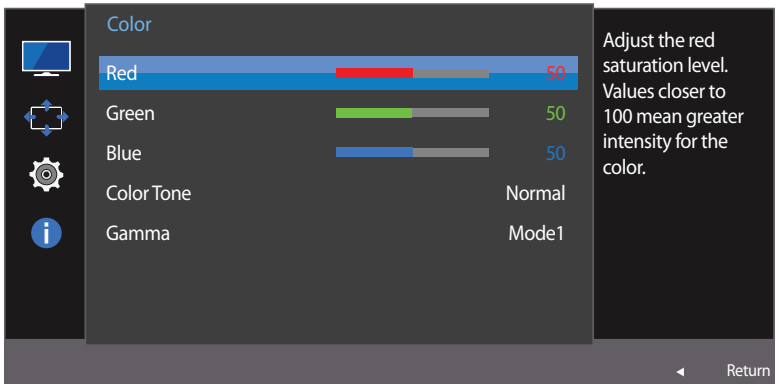
A detailed description of each function is provided. Refer to your product for details.

— Adjust the tint of the screen. This menu is not available when SAMSUNG MAGIC**Bright** is set to **Cinema** or **Dynamic Contrast** mode.

— This menu is not available when **Game Mode** is enabled.

— This menu is not available when **Eye Saver Mode** is enabled.





– The displayed image may differ depending on the model.

Configuring Color

1 When the Function Key Guide appears, select ▥ by moving the JOG button UP. Next, press the JOG button.

2 Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.

3 Move to **Color** controlling the JOG button UP/DOWN and press the JOG button.

- **Red**: Adjust the red saturation level. Values closer to 100 mean greater intensity for the color.
- **Green**: Adjust the green saturation level. Values closer to 100 mean greater intensity for the color.
- **Blue**: Adjust the blue saturation level. Values closer to 100 mean greater intensity for the color.
- **Color Tone**: Select a color tone that best suits your viewing needs.
  - **Cool 2**: Set the color temperature to be cooler than **Cool 1**.
  - **Cool 1**: Set the color temperature to be cooler than **Normal** mode.
  - **Normal**: Display the standard color tone.
  - **Warm 1**: Set the color temperature to be warmer than **Normal** mode.
  - **Warm 2**: Set the color temperature to be warmer than **Warm 1**.
  - **Custom**: Customize the color tone.

  — When the external input is connected through HDMI and **PC/AV Mode** is set to **AV**, **Color Tone** has four color temperature settings (**Cool**, **Normal**, **Warm** and **Custom**).
- **Gamma**: Adjust the middle level of luminance.
  - **Mode1** / **Mode2** / **Mode3**

4 Move to the desired option by controlling the JOG button and then press the JOG button.

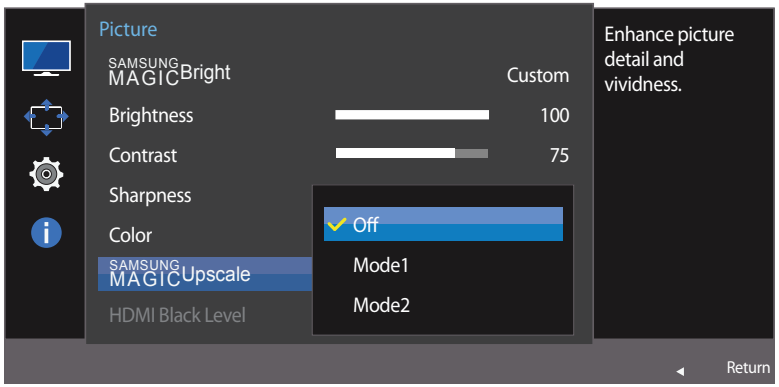
5 The selected option will be applied.

SAMSUNG MAGIC Upscale

SAMSUNG MAGIC**Upscale** function can enhance the layers of the picture details and the vividness of the picture.

— Adjust the tint of the screen. This menu is not available when SAMSUNG MAGIC**Bright** is set to **Cinema** or **Dynamic Contrast** mode.

— This menu is not available when **Game Mode** is enabled.



– The displayed image may differ depending on the model.

Configuring SAMSUNG MAGIC Upscale

1 When the Function Key Guide appears, select ▥ by moving the JOG button UP. Next, press the JOG button.

2 Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.

3 Move to SAMSUNG MAGIC**Upscale** controlling the JOG button UP/DOWN and press the JOG button.

- **Off** / **Mode1** / **Mode2**

  — Comparing with **Mode1**, **Mode2** has a stronger effect.

4 Move to the desired option by controlling the JOG button and then press the JOG button.

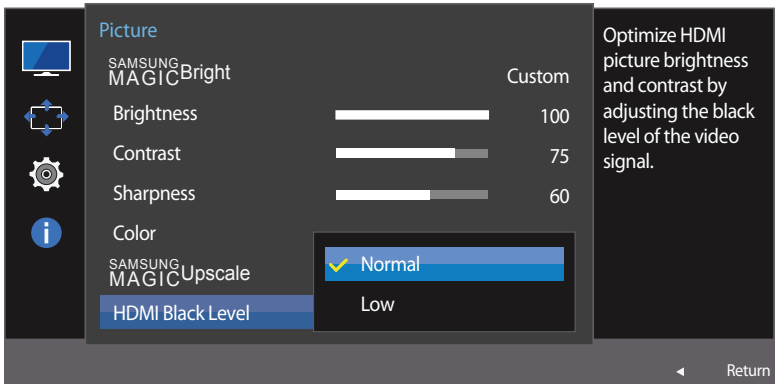
5 The selected option will be applied.

HDMI Black Level

If a DVD player or set-top box is connected to the product via HDMI, image quality degradation (contrast/color degradation, black level, etc.) may occur, depending on the connected source device. In such case, **HDMI Black Level** can be used to adjust the image quality.

If this is the case, correct the degraded picture quality using **HDMI Black Level**.

— This function is only available in **HDMI** mode.



– The displayed image may differ depending on the model.

Configuring the HDMI Black Level Settings

1 When the Function Key Guide appears, select ▥ by moving the JOG button UP. Next, press the JOG button.

2 Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.

3 Move to **HDMI Black Level** controlling the JOG button UP/DOWN and press the JOG button.

- **Normal**: Select this mode when there is no contrast ratio degradation.
- **Low**: Select this mode to reduce the black level and increase the white level when there is a contrast ratio degradation.

4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.

5 The selected option will be applied.

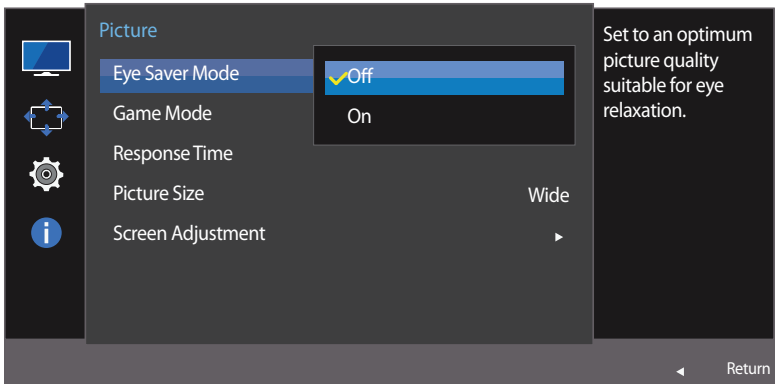
— **HDMI Black Level** may not be compatible with some source devices.

— The **HDMI Black Level** feature is only activated at a certain **AV** resolution, such as 720P and 1080P.

Eye Saver Mode

Set to an optimum picture quality suitable for eye relaxation.

TÜV Rheinland "Low Blue Light Content" is a certification for products which meet requirements for lower blue light levels. When **Eye Saver Mode** is '**On**', the blue light that wavelength is around 400nm will become lower and lower, and one hour later it will approach the optimum picture quality suitable for eye relaxation. At the same time, the blue light level is lower than in the default settings, and it was tested by TÜV Rheinland and certified as it met the requirements of TÜV Rheinland "Low Blue Light Content" standards.



– The displayed image may differ depending on the model.

Configuring Eye Saver Mode

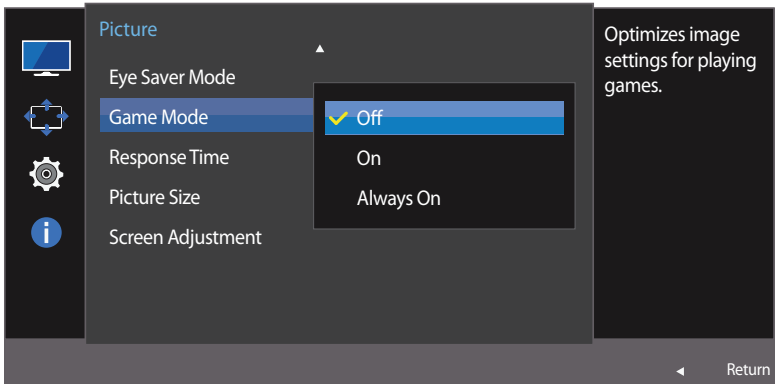
1. When the Function Key Guide appears, select ▥ by moving the JOG button UP. Next, press the JOG button.
2. Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.
3. Move to **Eye Saver Mode** controlling the JOG button UP/DOWN and press the JOG button.
4. Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
5. The selected option will be applied.

Game Mode

Configure the product screen settings for game mode.

Use this feature when playing games on a PC or when a game console such as PlayStation™ or Xbox™ is connected.

— This menu is not available when **Eye Saver Mode** is enabled.



– The displayed image may differ depending on the model.

Configuring Game Mode

1 When the Function Key Guide appears, select ▥ by moving the JOG button UP. Next, press the JOG button.

2 Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.

3 Move to **Game Mode** controlling the JOG button UP/DOWN and press the JOG button.

4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.

5 The selected option will be applied.

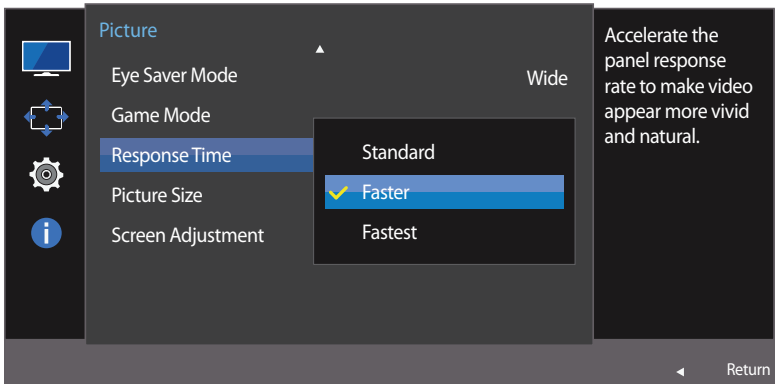
— When the monitor turns off, enters power-saving mode or changes input sources, **Game Mode** turns **Off** even if it is set to **On**.

— If you want to keep **Game Mode** enabled all the time, select **Always On**.

Response Time

Accelerate the panel response rate to make video appear more vivid and natural.

— It is best to set **Response Time** to **Standard** or **Faster** when you are not viewing a movie.



– The displayed image may differ depending on the model.

Configuring the Response Time

1 When the Function Key Guide appears, select by moving the JOG button UP. Next, press the JOG button.

2 Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.

3 Move to **Response Time** controlling the JOG button UP/DOWN and press the JOG button.

- **Standard** / **Faster** / **Fastest**

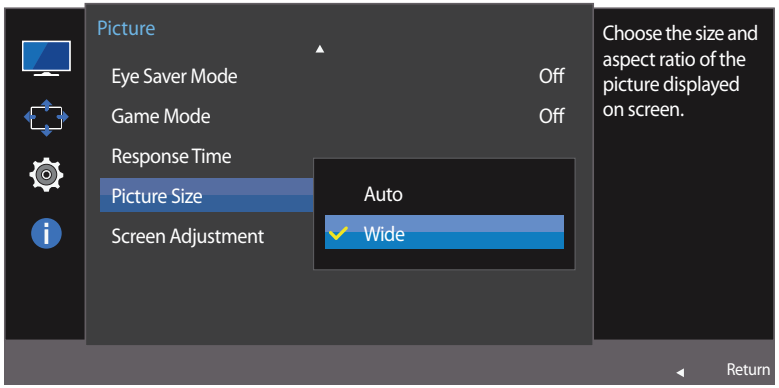
4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.

5 The selected option will be applied.

Picture Size

Change the picture size.

In PC mode



– The displayed image may differ depending on the model.

Changing the Picture Size

1 When the Function Key Guide appears, select ▥ by moving the JOG button UP. Next, press the JOG button.

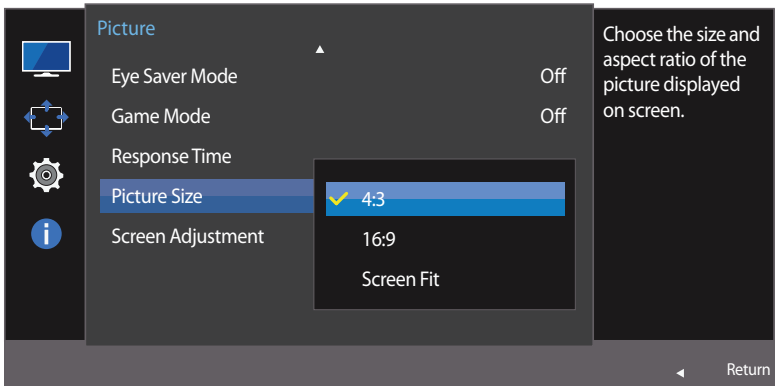
2 Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.

3 Move to **Picture Size** controlling the JOG button UP/DOWN and press the JOG button.

In PC mode

- **Auto**: Display the picture according to the aspect ratio of the input source.
- **Wide**: Display the picture in full screen regardless of the aspect ratio of the input source.

In AV mode



– The displayed image may differ depending on the model.

In AV mode

- **4:3**: Display the picture with an aspect ratio of 4:3. Suitable for videos and standard broadcasts.
- **16:9**: Display the picture with an aspect ratio of 16:9.
- **Screen Fit**: Display the picture with the original aspect ratio without cutting off.

— The function may not be supported depending on the ports provided with the product.

— Changing the screen size is available when the following conditions are satisfied.

— A digital output device is connected using the HDMI cable.

— The input signal is 480p, 576p, 720p, or 1080p and monitor can display normally (Not every model can support all of these signals.).

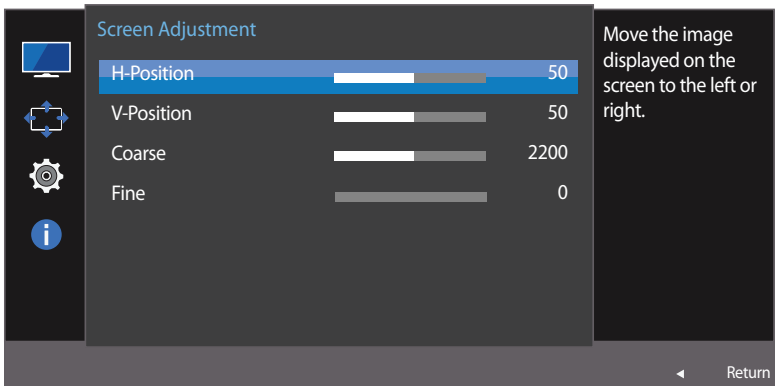
— This can only be set when the external input is connected through HDMI and **PC/AV Mode** is set to **AV**.

4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.

5 The selected option will be applied.

Screen Adjustment

- This menu is available in **Analog** mode only.
- This menu is only available when **Picture Size** is set to **Screen Fit** in **AV** Mode. When a 480P or 576P or 720P or 1080P signal is input in **AV** mode and the monitor can display normally, select **Screen Fit** to adjust horizontal position in 0-6 levels.



– The displayed image may differ depending on the model.

Configuring H-Position & V-Position

H-Position: Move the screen to the left or right.

V-Position: Move the screen up or down.

1. When the Function Key Guide appears, select ▥ by moving the JOG button UP. Next, press the JOG button.
2. Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.
3. Move to **Screen Adjustment** controlling the JOG button UP/DOWN and press the JOG button.
4. Move to the **H-Position** or **V-Position** controlling the JOG button UP/DOWN and press the JOG button.
5. Adjust the **H-Position** or **V-Position** controlling the JOG button LEFT/RIGHT and press the JOG button.
6. The selected option will be applied.

Adjust the screen frequency.

This menu is available in **Analog** mode only.

– The displayed image may differ depending on the model.

Configuring Coarse

1. When the Function Key Guide appears, select by moving the JOG button UP. Next, press the JOG button.
2. Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.
3. Move to **Screen Adjustment** controlling the JOG button UP/DOWN and press the JOG button.
4. Move to the **Coarse** controlling the JOG button UP/DOWN and press the JOG button.
5. Adjust the **Coarse** controlling the JOG button LEFT/RIGHT.
6. The selected option will be applied.

Fine-adjust the screen to obtain a vivid picture.

This menu is available in **Analog** mode only.

– The displayed image may differ depending on the model.

Configuring Fine

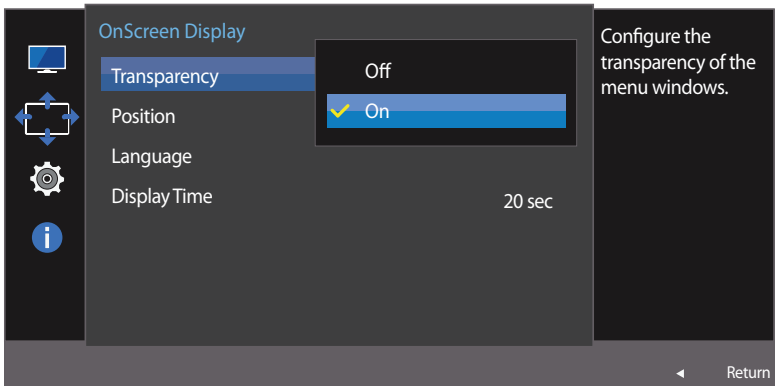
1. When the Function Key Guide appears, select by moving the JOG button UP. Next, press the JOG button.
2. Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.
3. Move to **Screen Adjustment** controlling the JOG button UP/DOWN and press the JOG button.
4. Move to the **Fine** controlling the JOG button UP/DOWN and press the JOG button.
5. Adjust the **Fine** controlling the JOG button LEFT/RIGHT.
6. The selected option will be applied.

Chapter 05
Coordinating OSD

A detailed description of each function is provided. Refer to your product for details.

Transparency

Set the transparency for the menu windows.



– The displayed image may differ depending on the model.

Changing Transparency

1 When the Function Key Guide appears, select ▥ to display the corresponding menu screen.

2 Move to **OnScreen Display** controlling the JOG button UP/DOWN and press the JOG button.

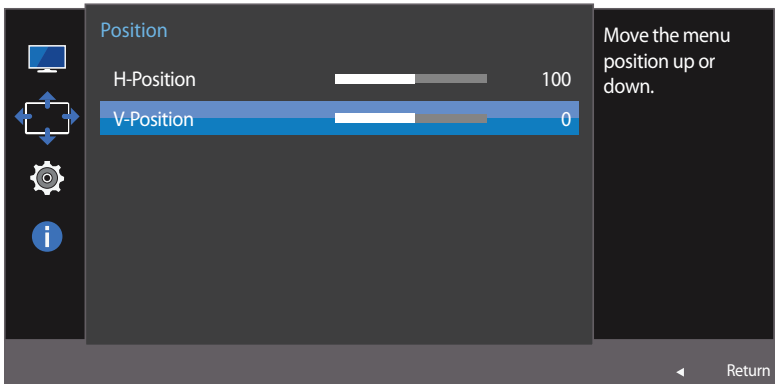
3 Move to **Transparency** controlling the JOG button UP/DOWN and press the JOG button.

- **Off** / **On**

4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.

5 The selected option will be applied.

Position



– The displayed image may differ depending on the model.

Configuring Position

H-Position: Move the menu position to the left or right.

V-Position: Move the menu position up or down.

1 When the Function Key Guide appears, select ▥ by moving the JOG button UP. Next, press the JOG button.

2 Move to **OnScreen Display** controlling the JOG button UP/DOWN and press the JOG button.

3 Move to **Position** controlling the JOG button UP/DOWN and press the JOG button.

4 Move to the **H-Position** or **V-Position** controlling the JOG button UP/DOWN and press the JOG button.

5 Adjust the **H-Position** or **V-Position** controlling the JOG button LEFT/RIGHT and press the JOG button.

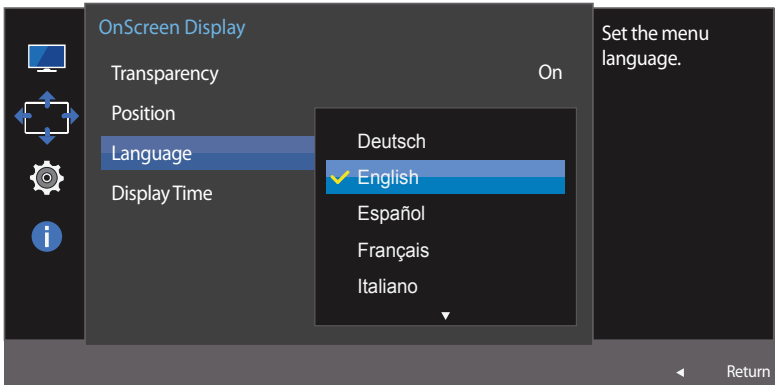
6 The selected option will be applied.

Language

Set the menu language.

— A change to the language setting will only be applied to the onscreen menu display.

— It will not be applied to other functions on your PC.



– The displayed image may differ depending on the model.

Configuring Language

1 When the Function Key Guide appears, select ▥ by moving the JOG button UP. Next, press the JOG button.

2 Move to **OnScreen Display** controlling the JOG button UP/DOWN and press the JOG button.

3 Move to **Language** controlling the JOG button UP/DOWN and press the JOG button.

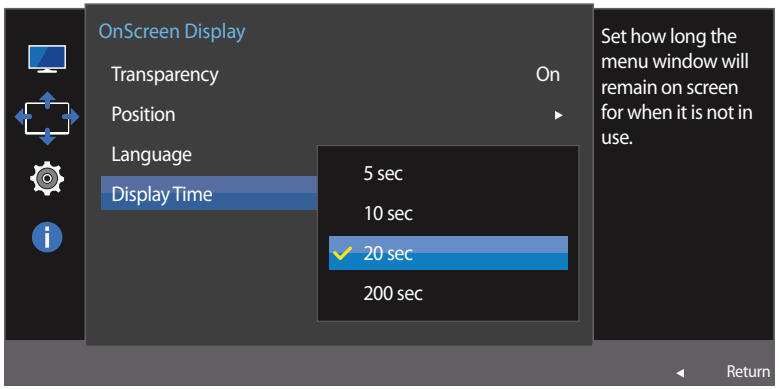
4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.

5 The selected option will be applied.

Display Time

Set the on-screen display (OSD) menu to automatically disappear if the menu is not used for a specified period of time.

Display Time can be used to specify the time after which you want the OSD menu to disappear.



– The displayed image may differ depending on the model.

Configuring Display Time

1 When the Function Key Guide appears, select ▥ to display the corresponding menu screen.

2 Move to **OnScreen Display** controlling the JOG button UP/DOWN and press the JOG button.

3 Move to **Display Time** controlling the JOG button UP/DOWN and press the JOG button.

- **5 sec** / **10 sec** / **20 sec** / **200 sec**

4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.

5 The selected option will be applied.

Chapter 06
Setup and Reset

A detailed description of each function is provided. Refer to your product for details.

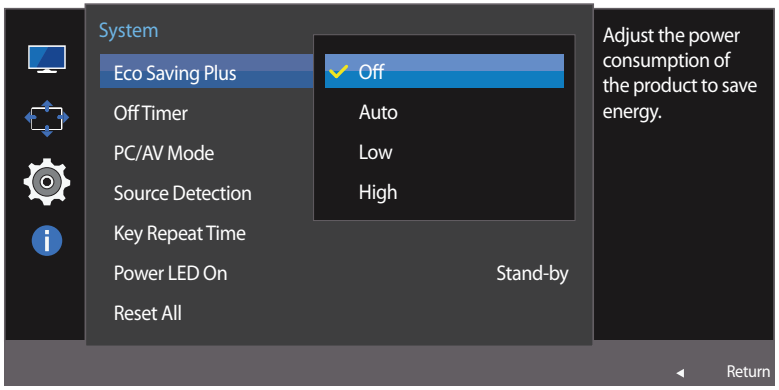
Eco Saving Plus

The **Eco Saving Plus** function reduces power consumption by controlling the electric current used by the monitor panel.

— This option is not available when SAMSUNG MAGIC**Bright** is in **Dynamic Contrast** mode.

— This menu is not available when **Game Mode** is enabled.

— This menu is not available when **Eye Saver Mode** is enabled.



– The displayed image may differ depending on the model.

Configuring Eco Saving Plus

1 When the Function Key Guide appears, select ▥ by moving the JOG button UP. Next, press the JOG button.

2 Move to **System** controlling the JOG button UP/DOWN and press the JOG button.

3 Move to **Eco Saving Plus** controlling the JOG button UP/DOWN and press the JOG button.

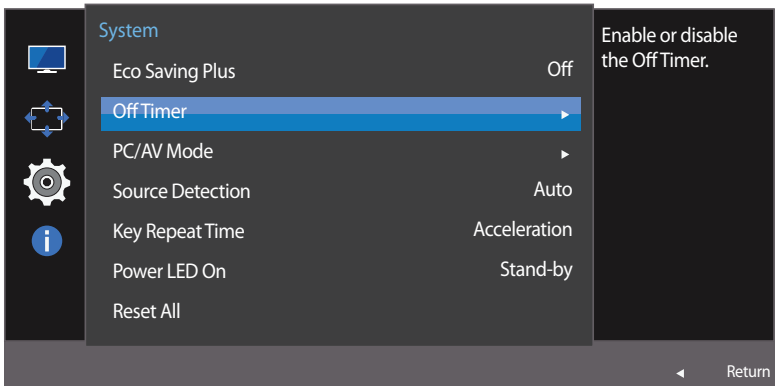
- **Off**: Deactivate the **Eco Saving Plus** function.
- **Auto**: The power consumption will automatically be reduced by about 10% over the current setting. (The reduction of power consumption depends on the customer screen brightness condition.)
- **Low**: The power consumption will be reduced by 25% over the default setting.
- **High**: The power consumption will be reduced by 50% over the default setting.

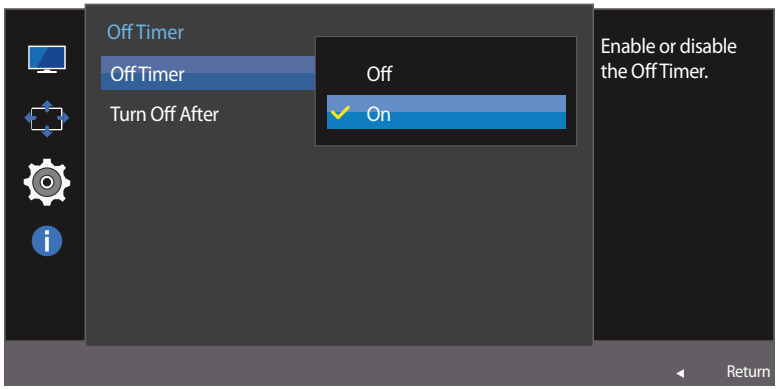
4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.

5 The selected option will be applied.

Off Timer

You can set the product to automatically turn off.





– The displayed image may differ depending on the model.

Configuring Off Timer

1 When the Function Key Guide appears, select by moving the JOG button UP. Next, press the JOG button.

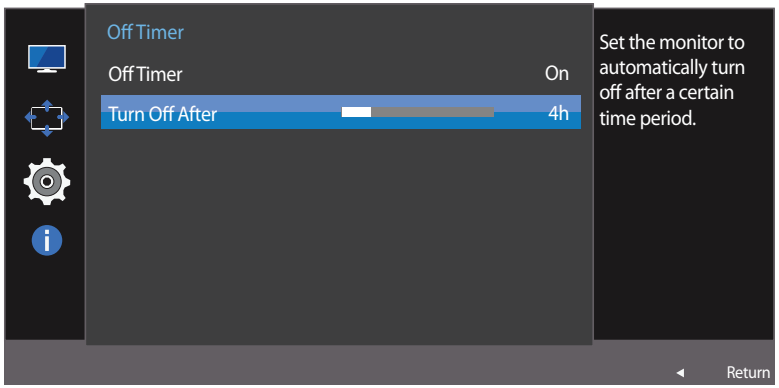
2 Move to **System** controlling the JOG button UP/DOWN and press the JOG button.

3 Move to **Off Timer** controlling the JOG button UP/DOWN and press the JOG button.

- **Off**: Deactivate the off timer so that the product does not power off automatically.
- **On**: Activate the off timer so that the product powers off automatically.

4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.

5 The selected option will be applied.



– The displayed image may differ depending on the model.

Configuring Turn Off After

— This option is only available when **Off Timer** is set to **On**.

1 When the Function Key Guide appears, select ▥ by moving the JOG button UP. Next, press the JOG button.

2 Move to **System** controlling the JOG button UP/DOWN and press the JOG button.

3 Move to **Off Timer** controlling the JOG button UP/DOWN and press the JOG button.

4 Move to **Turn Off After** controlling the JOG button UP/DOWN and press the JOG button.

5 Adjust the **Turn Off After** controlling the JOG button LEFT/RIGHT.

6 The selected option will be applied.

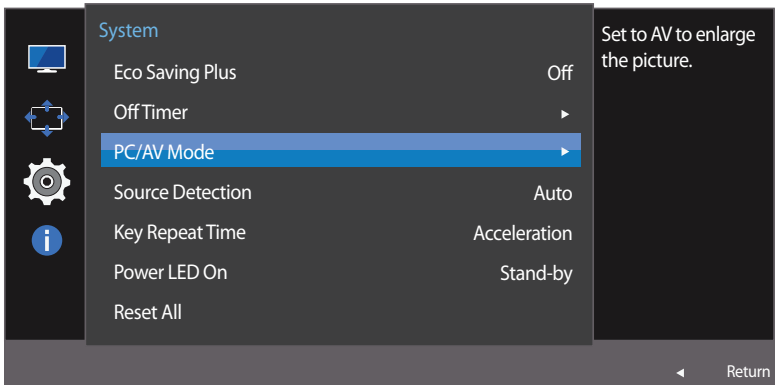
— The off timer can be set within a range of 1 to 23 hours. The product will automatically power off after the specified number of hours.

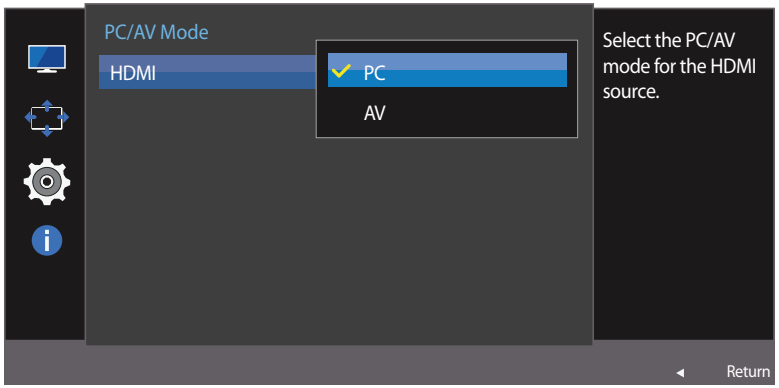
— For products for the market in some regions, the **Off Timer** is set to automatically activate 4 hours after the product powers on. This is done in accordance with power supply regulations. If you do not want the timer to activate, go to **MENU** → **System** and set **Off Timer** to **Off**.

PC/AV Mode

Set **PC/AV Mode** to **AV**. The picture size will be enlarged.

This option is useful when you view a movie.





– The displayed image may differ depending on the model.

– This function does not support **Analog** mode.

– Supplied for the wide models only such as 16:9 or 16:10.

– If the monitor is in **HDMI** mode and the screen says **Check Signal Cable** or power saving mode activates, press the JOG button to display the function-button screen and then select the icon. You can select **PC** or **AV**.

Configuring PC/AV Mode

1 When the Function Key Guide appears, select by moving the JOG button UP. Next, press the JOG button.

2 Move to **System** controlling the JOG button UP/DOWN and press the JOG button.

3 Move to **PC/AV Mode** controlling the JOG button UP/DOWN and press the JOG button.

4 Move to the **HDMI** controlling the JOG button UP/DOWN and press the JOG button.

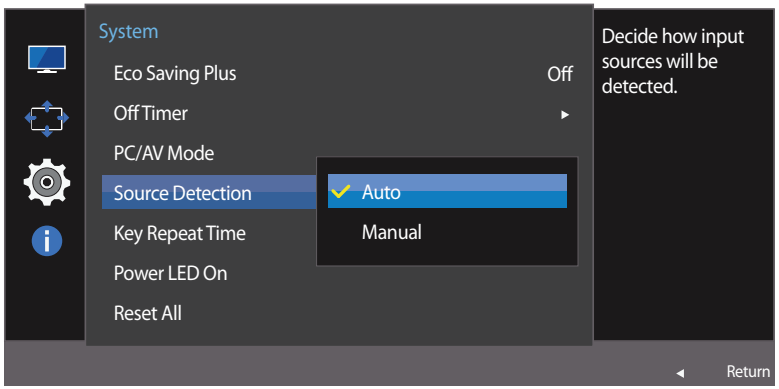
- Set to PC when connected to a PC.
- Set to AV when connected to an AV device.

5 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.

6 The selected option will be applied.

Source Detection

You can activate **Source Detection**.



– The displayed image may differ depending on the model.

Configuring Source Detection

1 When the Function Key Guide appears, select ▥ by moving the JOG button UP. Next, press the JOG button.

2 Move to **System** controlling the JOG button UP/DOWN and press the JOG button.

3 Move to **Source Detection** controlling the JOG button UP/DOWN and press the JOG button.

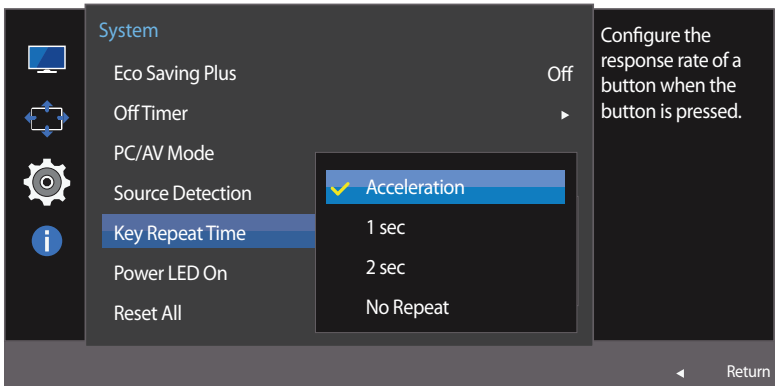
- **Auto**: The input source is automatically recognized.
- **Manual**: Manually select an input source.

4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.

5 The selected option will be applied.

Key Repeat Time

Control the response rate of a button when the button is pressed.



– The displayed image may differ depending on the model.

Configuring Key Repeat Time

1 When the Function Key Guide appears, select ▥ by moving the JOG button UP. Next, press the JOG button.

2 Move to **System** controlling the JOG button UP/DOWN and press the JOG button.

3 Move to **Key Repeat Time** controlling the JOG button UP/DOWN and press the JOG button.

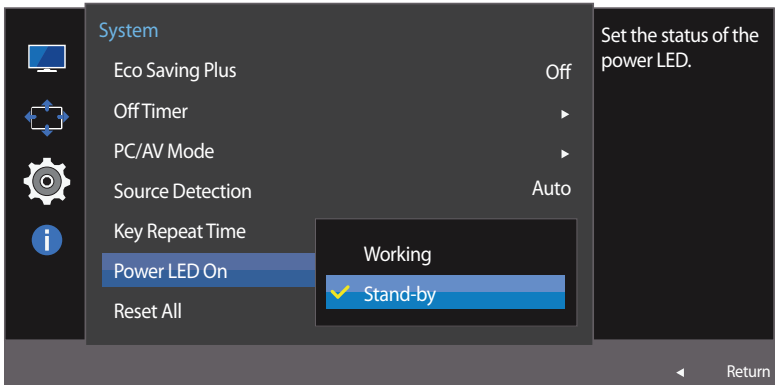
- **Acceleration**, **1 sec**, or **2 sec** can be selected. If **No Repeat** is selected, a command responds only once when a button is pressed.

4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.

5 The selected option will be applied.

Power LED On

Configure the settings to enable or disable the power LED located at the lower part of the product.



– The displayed image may differ depending on the model.

Configuring Power LED On

1 When the Function Key Guide appears, select ▥ by moving the JOG button UP. Next, press the JOG button.

2 Move to **System** controlling the JOG button UP/DOWN and press the JOG button.

3 Move to **Power LED On** controlling the JOG button UP/DOWN and press the JOG button.

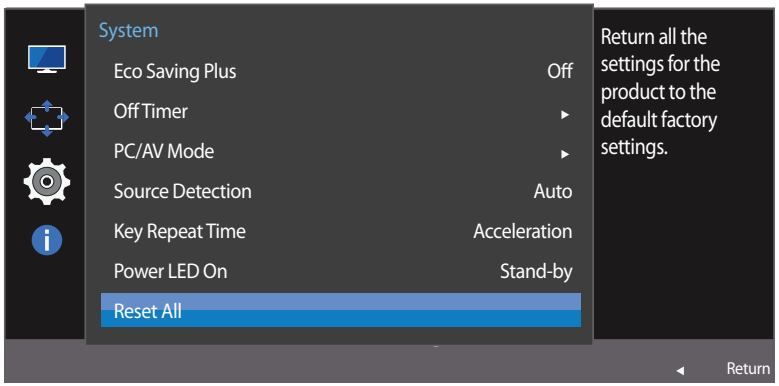
- **Working**: The power LED is on when the product is turned on.
- **Stand-by**: The power LED is on when the product is turned off.

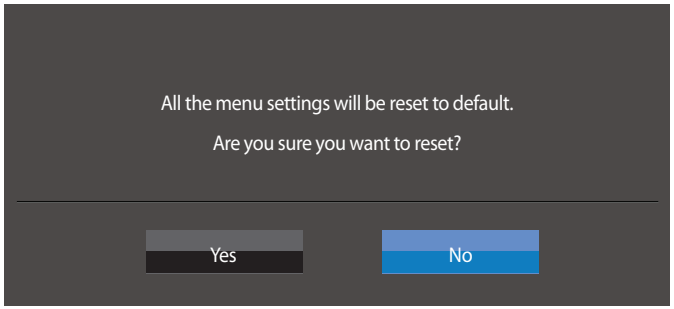
4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.

5 The selected option will be applied.

Reset All

Return all the settings for the product to the default factory settings.





– The displayed image may differ depending on the model.

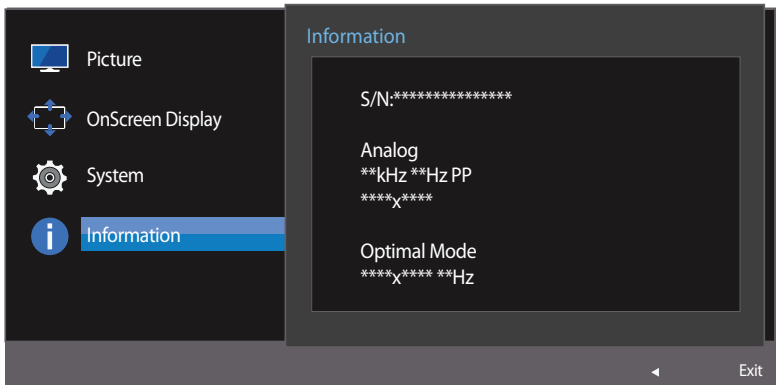
Initializing Settings (Reset All)

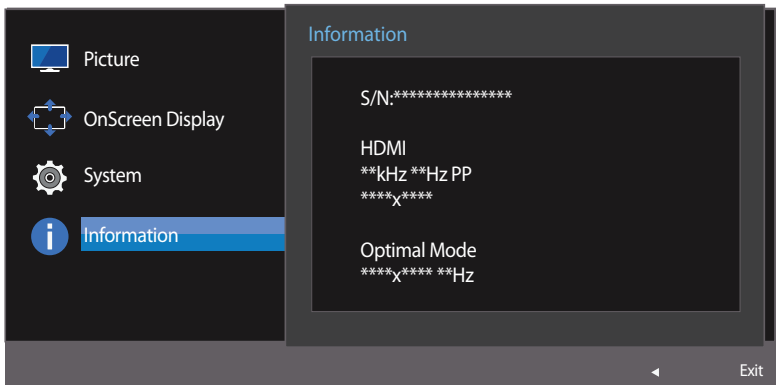
1. When the Function Key Guide appears, select ▥ by moving the JOG button UP. Next, press the JOG button.
2. Move to **System** controlling the JOG button UP/DOWN and press the JOG button.
3. Move to **Reset All** controlling the JOG button UP/DOWN and press the JOG button.
4. Move to the desired option controlling the JOG button LEFT/RIGHT and press the JOG button.
5. The selected option will be applied.

Chapter 07
Information Menu and Others

A detailed description of each function is provided. Refer to your product for details.

Information





– The displayed image may differ depending on the model.

Displaying Information

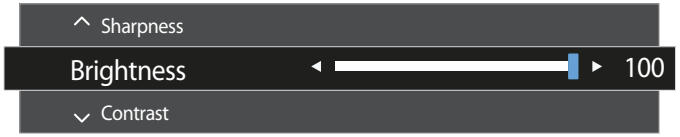
View the current input source, frequency and resolution.

1 When the Function Key Guide appears, select ▥ by moving the JOG button UP. Next, press the JOG button.

2 Move to **Information** controlling the JOG button UP/DOWN and press the JOG button. The current input source, frequency and resolution will appear.

Configuring Brightness, Contrast and Sharpness from the Initial Screen

You can adjust **Brightness**, **Contrast** or **Sharpness** by moving the JOG button up or down, if no OSD menu is displayed.



– The displayed image may differ depending on the model.

Brightness

— This menu is not available when SAMSUNG MAGIC**Bright** is set to **Dynamic Contrast** mode.

— This menu is not available when **Eco Saving Plus** is enabled.

— This menu is not available when **Eye Saver Mode** is enabled.

Contrast

— This menu is not available when SAMSUNG MAGIC**Bright** is in **Cinema** or **Dynamic Contrast** mode.

— This menu is not available when **Game Mode** is enabled.

Sharpness

— This menu is not available when SAMSUNG MAGIC**Bright** is in **Cinema** or **Dynamic Contrast** mode.

— This menu is not available when **Game Mode** is enabled.

1 Move the JOG button UP/DOWN to select **Brightness**, **Contrast** or **Sharpness**.

2 Move the JOG button LEFT/RIGHT to adjust the **Brightness**, **Contrast** or **Sharpness** setting.

Configuring Volume in the Initial Screen

You can adjust **Volume** by moving the JOG button left or right, if no OSD menu is displayed.

This function does not support **HDMI** mode.

– The displayed image may differ depending on the model.

Volume

1 Adjust the **Volume** controlling the JOG button LEFT/RIGHT.

— If the audio quality of a connected input device is poor, the Auto Mute function on the product may mute the sound or cause choppy audio when applying the headphones or speakers. Set the input volume for the input device to at least 20% and control the volume using the volume control (JOG button LEFT/RIGHT) on the product.

— What is Auto Mute?

The function mutes the audio to improve sound effect when there is sound noise or when the input signal is weak, usually due to a problem with the volume of an input device.

— To activate the **Mute** function, access the **Volume** control screen, then use the JOG button to move the focus down. To deactivate the **Mute** function, access the **Volume** control screen, then increase or decrease the **Volume**.

Chapter 08
Installing the Software

Easy Setting Box

Easy Setting Box

Easy Setting Box enables users to use the monitor by partitioning multiple sections.

Installing the Software

1 To install the latest version of **Easy Setting Box**, download it from the Samsung Electronics website at http://www.samsung.com.

2 Select the **Easy Setting Box** setup program.

3 When the Installation Wizard appears, click **Next**.

4 Follow the instructions given on the screen to proceed with installation.

— The software may not work properly if you do not restart the computer after the installation.

— The **Easy Setting Box** icon may not appear depending on the computer system and the product specifications.

— If the shortcut icon does not appear, press the F5 key.

Restrictions and Problems with the Installation (Easy Setting Box)

The **Easy Setting Box** installation may be affected by the Graphics Card, Motherboard and the Networking Environment.

System Requirements

OS

- Windows Vista 32Bit/64Bit
- Windows 7 32Bit/64Bit
- Windows 8 32Bit/64Bit
- Windows 8.1 32Bit/64Bit

Hardware

- At least 32MB of memory
- At least 60MB of free space on the hard disk drive

Removing the Software

Click **Start**, select **Settings**/**Control Panel**, and then double-click **Add or Remove Programs**.

Select **Easy Setting Box** from the program list and click the **Add/Delete** button.

Chapter 09
Troubleshooting Guide

Requirements Before Contacting Samsung Customer Service Center

Before calling Samsung Customer Service Center, test your product as follows. If the problem persists, contact Samsung Customer Service Center.

Testing the Product

Check if your product is operating normally by using the product test function.

If the screen is turned off and the power indicator blinks even though the product is properly connected to a PC, perform a self-diagnosis test.

1 Power off both the PC and product.

2 Disconnect the cables from the product.

3 Power on the product.

4 If the message **Check Signal Cable** appears, the product is working normally.

If the screen remains blank, check the PC system, video controller and cable.

Checking the Resolution and Frequency

For a mode that exceeds the supported resolution(refer to Standard Signal Mode Table), the message **Not Optimum Mode** will appear for a short time.

— The displayed resolution may vary depending on the product or PC system settings.

Check the following.

Installation issue (PC mode)

Issues	Solutions
The screen keeps switching on and off.	Check the cable connection between the product and PC, and ensure the connectors are locked.
Blank spaces are found on all four sides of the screen when an HDMI or HDMI-DVI cable is connected to the product and PC.	The blank spaces found on the screen have nothing to do with the product. Blank spaces on the screen are caused by the PC or graphics card. To resolve the problem, adjust the screen size in the HDMI or DVI settings for the graphics card. If the graphics card settings menu does not have an option to adjust the screen size, update the graphics card driver to the latest version. (Please contact the graphics card or computer manufacturer for further details about how to adjust the screen settings.)

Screen issue

Issues	Solutions
The power LED is off. The screen will not switch on.	Check that the power cable is connected properly.
The message Check Signal Cable appears.	Check that the cable is properly connected to the product.
	Check that the device connected to the product is powered on.
Not Optimum Mode is displayed.	This message appears when the signal from the graphics card exceeds the maximum resolution or frequency for the product.
	Change the maximum resolution and frequency to suit the product performance, referring to Standard Signal Mode Table (P.71).
The images on the screen look distorted.	Check the cable connection to the product.

Issues	Solutions
The screen is not clear. The screen is blurry.	Adjust **Coarse** and **Fine**.
	Remove any accessories (video extension cable, etc.) and try again.
	Set the resolution and frequency to the recommended level.
The screen appears unstable and shaky. **There are shadows or ghost images left on the screen.**	Check that the resolution and frequency for the PC are within the range of resolution and frequency compatible with the product. Next, if required, change the settings, referring to Standard Signal Mode Table (P.71) in this manual and the **Information** menu on the product.
The screen is too bright. The screen is too dark.	Adjust **Brightness** and **Contrast**.
Screen color is inconsistent.	Change the **Color** settings.
The colors on the screen have a shadow and are distorted.	Change the **Color** settings.
White does not really look white.	Change the **Color** settings.
There is no image on the screen and the power LED blinks every 0.5 to 1 second.	The product is operating in power-saving mode.
	Press any key on the keyboard or move the mouse to return to normal operating mode.
Text is blurry.	If using a Windows OS (e.g. Windows 7, Windows 8 or Windows 8.1): Go to **Control Panel** ⟶ **Fonts** ⟶ **Adjust ClearType text** and change **Turn on ClearType**.
Video playback is choppy.	Playback of high-definition large video files can be choppy. This may be because the video player is not optimized for the computer resource. Try playing the file on another video player.

Sound issue

Issues	Solutions
There is no sound.	Check the connection of the audio cable or adjust the volume.
	Check the volume.
The volume is too low.	Adjust the volume.
	If the volume is still low after turning it up to the maximum level, adjust the volume on your PC sound card or software program.
Video is available but there is no sound.	Sound cannot be heard if a HDMI-DVI cable is used to connect the input device. Connect the device using an HDMI cable.

Source device issue

Issues	Solutions
A beeping sound is heard when my PC is booting.	If a beeping sound is heard when your PC is booting, have your PC serviced.

Q & A

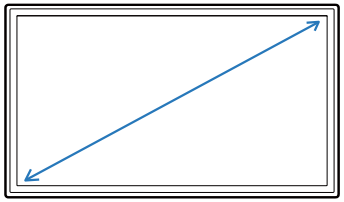
Refer to the user manual for your PC or graphics card for further instructions on adjustment.

Question	Answer
How can I change the frequency?	Set the frequency on your graphics card. • Windows XP: Go to **Control Panel** ⟶ **Appearance and Themes** ⟶ **Display** ⟶ **Settings** ⟶ **Advanced** ⟶ **Monitor**, and adjust **Refresh rate** under **Monitor settings**. • Windows ME/2000: Go to **Control Panel** ⟶ **Display** ⟶ **Settings** ⟶ **Advanced** ⟶ **Monitor**, and adjust **Refresh rate** under **Monitor settings**. • Windows Vista: Go to **Control Panel** ⟶ **Appearance and Personalization** ⟶ **Personalization** ⟶ **Display Settings** ⟶ **Advanced Settings** ⟶ **Monitor**, and adjust **Refresh rate** under **Monitor settings**. • Windows 7: Go to **Control Panel** ⟶ **Appearance and Personalization** ⟶ **Display** ⟶ **Screen Resolution** ⟶ **Advanced settings** ⟶ **Monitor**, and adjust **Refresh rate** under **Monitor settings**. • Windows 8(Windows 8.1): Go to **Settings** ⟶ **Control Panel** ⟶ **Appearance and Personalization** ⟶ **Display** ⟶ **Screen Resolution** ⟶ **Advanced settings** ⟶ **Monitor**, and adjust **Refresh rate** under **Monitor settings**.
How can I change the resolution?	• Windows XP: Go to **Control Panel** ⟶ **Appearance and Themes** ⟶ **Display** ⟶ **Settings**, and adjust the resolution. • Windows ME/2000: Go to **Control Panel** ⟶ **Display** ⟶ **Settings**, and adjust the resolution. • Windows Vista: Go to **Control Panel** ⟶ **Appearance and Personalization** ⟶ **Personalize** ⟶ **Display Settings**, and adjust the resolution. • Windows 7: Go to **Control Panel** ⟶ **Appearance and Personalization** ⟶ **Display** ⟶ **Adjust Resolution**, and adjust the resolution. • Windows 8(Windows 8.1): Go to **Settings** ⟶ **Control Panel** ⟶ **Appearance and Personalization** ⟶ **Display** ⟶ **Adjust Resolution**, and adjust the resolution.

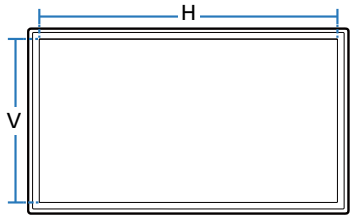
Question	Answer
How do I set power-saving mode?	• Windows XP: Set power-saving mode in **Control Panel** ⟶ **Appearance and Themes** ⟶ **Display** ⟶ **Screen Saver Settings** or BIOS SETUP on the PC. • Windows ME/2000: Set power-saving mode in **Control Panel** ⟶ **Display** ⟶ **Screen Saver Settings** or BIOS SETUP on the PC. • Windows Vista: Set power-saving mode in **Control Panel** ⟶ **Appearance and Personalization** ⟶ **Personalize** ⟶ **Screen Saver Settings** or BIOS SETUP on the PC. • Windows 7: Set power-saving mode in **Control Panel** ⟶ **Appearance and Personalization** ⟶ **Personalize** ⟶ **Screen Saver Settings** or BIOS SETUP on the PC. • Windows 8(Windows 8.1): Set power-saving mode in **Settings** ⟶ **Control Panel** ⟶ **Appearance and Personalization** ⟶ **Personalize** ⟶ **Screen Saver Settings** or BIOS SETUP on the PC.

Chapter 10
Specifications

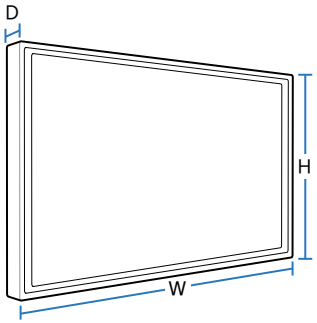
- Size



- Display area



- Dimensions (W x H x D)



General

Model Name		S24E510C
Panel	**Size**	59.8 cm
	Display area	521.39 mm (H) x 293.28 mm (V)
	Pixel Pitch	0.27156 mm (H) x 0.27156 mm (V)
Dimensions (W x H x D) / Weight	**Without Stand**	547.6 x 323.4 x 57.0 mm / 3.3 kg
	With Stand	547.6 x 417 x 181.6 mm / 4.0 kg
Maximum Pixel Clock		148.5 MHz (HDMI)
Power Supply		AC 100 - 240 V ~ (+/- 10 %), 50/60 Hz ± 3 Hz Refer to the label at the back of the product as the standard voltage can vary in different countries.
Signal connectors		D-SUB, HDMI

Model Name		S24E510C
Environmental conditions	**Operating**	Temperature: 10 ˚C – 40 ˚C (50 ˚F – 104 ˚F) Humidity: 10 % – 80 %, non-condensing
	Storage	Temperature: -20 ˚C – 45 ˚C (-4 ˚F – 113 ˚F) Humidity: 5 % – 95 %, non-condensing

— Plug-and-Play

This monitor can be installed and used with any Plug-and-Play compatible systems. Two-way data exchange between the monitor and PC system optimizes the monitor settings. Monitor installation takes place automatically. However, you can customize the installation settings if desired.

— Panel Dots (Pixels)

Due to the nature of the manufacturing of this product, approximately 1 pixel per million (1ppm) may be brighter or darker on the LCD panel. This does not affect product performance.

— The above specifications are subject to change without notice to improve quality.

— This device is a Class B digital apparatus.

PowerSaver

The power-saving function of this product reduces power consumption by switching off the screen and changing the color of the power LED if the product is not used for a specified period of time. The power is not turned off in power-saving mode. To switch the screen back on, press any key on the keyboard or move the mouse. Power-saving mode only functions when the product is connected to a PC with a power-saving function.

Power Consumption	Power Consumption	Power saving mode	Power off (Power button)
Off	Off	Blinking	On
30 W	30 W	Less than 0.3 W	Less than 0.3 W

— The displayed power consumption level can vary in different operating conditions or when settings are changed.

— This product is not ENERGY STAR® certified.

— SOG(Sync On Green) is not supported.

— To reduce the power consumption to 0, disconnect the power cord. Disconnect the power cable if you will not be using the product for an extended period of time (during vacation, etc.)

Standard Signal Mode Table

– This product can be set to only one resolution for each screen size to obtain the optimum picture quality due to the nature of the panel. Using a resolution other than the specified resolution may degrade the picture quality. To avoid this, it is recommended that you select the optimum resolution specified for your product.

Model Name		S24E510C
Synchronization	Horizontal Frequency	30 – 81 kHz
	Vertical Frequency	56 – 60 Hz (HDMI)
Resolution	Optimum resolution	1920 x 1080 @ 60 Hz
	Maximum resolution	1920 x 1080 @ 60 Hz

If a signal that belongs to the following standard signal modes is transmitted from your PC, the screen will automatically be adjusted. If the signal transmitted from the PC does not belong to the standard signal modes, the screen may be blank even though the power LED turns on. In such a case, change the settings according to the following table by referring to the graphics card user manual.

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
VESA, 640 x 480	31.469	59.940	25.175	-/-
VESA, 800 x 600	35.156	56.250	36.000	+/+
VESA, 800 x 600	37.879	60.317	40.000	+/+
VESA, 1024 x 768	48.363	60.004	65.000	-/-
VESA, 1280 x 720	45.000	60.000	74.250	+/+
VESA, 1280 x 800	49.702	59.810	83.500	-/+
VESA, 1280 x 1024	63.981	60.020	108.000	+/+
VESA, 1440 x 900	55.935	59.887	106.500	-/+
VESA, 1600 x 900 RB	60.000	60.000	108.000	+/+

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
VESA, 1680 x 1050	65.290	59.954	146.250	-/+
VESA, 1920 x 1080	67.500	60.000	148.500	+/+

- Horizontal Frequency
  The time required to scan a single line from the left to the right side of the screen is called a horizontal cycle. The reciprocal number of a horizontal cycle is called horizontal frequency. Horizontal frequency is measured in kHz.
- Vertical Frequency
  Repeating the same picture dozens of times per second allows you to view natural pictures. The repeat frequency is called "vertical frequency" or "refresh rate" and is indicated in Hz.

Chapter 11
Appendix

Responsibility for the Pay Service (Cost to Customers)

— When the service is requested, in spite of in warranty, we may charge you for a visit from a service technician in the following cases.

Not a product defect

Cleaning of the product, Adjustment, Explanation, Re-installation and etc.

- If a service technician gives instructions on how to use product or simply adjusts options without disassembling product.
- If a defect is caused by external environmental factors (Internet, Antenna, Wired Signal, etc.)
- If a product is reinstalled or devices are connected additionally after installing the purchased product for the first time.
- If a product is reinstalled to move to a different spot or to move to a different house.
- If customer requests instructions on how to use because of another company's product.
- If customer requests instructions on how to use the network or another company's program.
- If customer requests software installation and setup for the product.
- If a service technician removes/cleans dusts or foreign materials inside of the product.
- If customer requests an installation additionally after purchasing a product through home-shopping or online.

A Product damage caused by customer's fault

Product damage caused by customer's mishandling or wrong repair

If a product damage is caused by;

- External impact or drop.
- Use of supplies or separatly sold product unspecified by Samsung.
- Repair from a person besides an engineer of outsourcing service company or partner of Samsung Electronics Co., Ltd.
- Remodeling or repairing the product by customer.
- Using it with incorrect voltage or non-authorised electrical connections.
- Not following the "cautions" in User Manual.

Others

- If product fails by natural disaster. (lightning, fire, earthquake, flood damage, etc)
- If consumable components are all used up. (Battery, Toner, Fluorescent lights, Head, Vibrator, Lamp, Filter, Ribbon, etc.)

— If customer requests a service in case the product has no defect, service fee may be charged. So please read User Manual first.

Correct Disposal

Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

(Applicable in countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

(For India Only)

This product is RoHS compliant.

For more information on safe disposal and recycling visit our website www.samsung.com/in or contact our Helpline numbers -

18002668282, 180030008282.

Terminology

OSD (On Screen Display)_____ On screen display (OSD) allows you to customize on-screen settings to optimize the picture quality as required. You can change the screen brightness, tint, size and many other settings using menus displayed on the screen.

Gamma_____ The Gamma menu adjusts the grey scale that represents middle tones on the screen. Adjusting the brightness brightens the whole screen, but adjusting Gamma only brightens the medium brightness.

Grey scale_____ Scale refers to levels of color intensity that show variations of color change from darker areas to brighter areas on the screen. Changes to the screen brightness are expressed with black and white variation, and grey scale refers to the medium area between black and white. Changing the grey scale through Gamma adjustment will change the medium brightness on the screen.

Scanning rate_____ Scanning rate, or refresh rate, refers to the frequency of screen refreshes. Screen data is transmitted as it refreshes to display an image, although the refreshing is invisible to the naked eye. The number of screen refreshes is called scanning rate and is measured in Hz. A scanning rate of 60Hz means that the screen refreshes 60 times per second. The screen scanning rate depends on the performance of the graphics cards in your PC and monitor.

Dot Pitch_____ The product and screen consist of red, green and blue dots.

A shorter distance between the dots produces a higher resolution. Dot pitch refers to the distance between the shortest distance between dots of the same color. Dot pitch is measured in millimeters.

Horizontal Frequency_____ Characters or images displayed on the monitor screen consist of numerous dots (pixels). Pixels are transmitted in horizontal lines, which are then arranged vertically to create an image. The horizontal frequency is measured in kHz and represents how many times horizontal lines per second are transmitted and displayed on the monitor screen. A horizontal frequency of 85 means that the horizontal lines that make up an image are transmitted 85000 times per second. The horizontal frequency is indicated in 85kHz.

Vertical Frequency_____ One image is made of numerous horizontal lines. The vertical frequency is measured in Hz and represents how many images can be created per second by those horizontal lines. A vertical frequency of 60 means that an image is transmitted 60 times per second. The vertical frequency is also called "refresh rate" and affects screen flicker.

Resolution_____ Resolution is the number of horizontal pixels and vertical pixels that form a screen. It represents the level of display detail. A higher resolution displays a greater amount of information on the screen and is suitable for performing multiple tasks at the same time.

E.g. A resolution of 1920 x 1080 consists of 1920 horizontal pixels (horizontal resolution) and 1080 vertical lines (vertical resolution).

Plug & Play_____ The Plug & Play feature allows the automatic exchange of information between a monitor and PC to produce an optimum display environment.

The monitor uses VESA DDC (international standard) to execute Plug & Play.